Condition of Education In Connecticut

Elementary and Secondary

Meeting *The Challenge*

1990/91

State of Connecticut

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Foreword

Opportunity is the essence of challenge.

When we meet a challenge — whatever it may be — we embrace the opportunity it offers us.

Our ongoing challenge is to provide educational excellence for all Connecticut learners — and, early in this decade, to do so with resources constrained by an economy in recession. By responding aggressively to this challenge, we embrace an extraordinary opportunity to shape a future of constructiveness, creativity and compassion.

Several responsibilities continue to be priorities for the 1990s:

- ensuring accountability for student performance;
- strengthening the teaching profession;
- targeting resources to those in the greatest educational need;
- reducing disparities in achievement; and
- achieving quality and integrated education.

This edition of *Meeting the Challenge* addresses these issues, and many others, as it describes the condition of education in Connecticut from July 1, 1988, through June 30, 1990, in context with previous years. An "Update" chapter discusses key events and activities through April 1991. By providing a perspective on the condition of education past and present, the report helps us understand what still needs to be done in order to shape the future we envision.

The details of that vision are clearly articulated in *Challenge for Excellence: Connecticut's Comprehensive Plan for Elementary, Secondary, Vocational, Career and Adult Education — A Policy Plan 1991-1995.* This five-year plan was adopted by the State Board of Education in April 1990 following an 18-month consensus-building process. Future editions of *Meeting the Challenge* will report on the condition of education in Connecticut in relation to the State Board of Education's goals, objectives and Indicators of Success included in the new Comprehensive Plan. Similarly, *Design for Excellence,* the Board's five-year plan for 1986-1990, has served as the reporting framework for this and related publications.

The statewide Indicators of Success were developed to provide clear and accurate measures of our progress toward achieving the objectives that support the State Board of Education's policy goals. They are vital to our efforts to evaluate results and be accountable to the public. *Meeting the Challenge 1990/91* represents our fifth opportunity to systematically review these indicators, a process that provides information and understanding we need in order to make decisions for the future. (Tables, charts and graphs relating to the indicators are identified throughout this report by this small symbol: ▱.) A revised set of indicators incorporated into the Comprehensive Plan for 1991-1995 will serve the same function in the coming years.

Fiscal constraints do not lessen the need for high-quality educational programs and services. In fact, in difficult economic times, the need increases. Fiscal constraints do not absolve us of our responsibilities as educators, decision makers and citizens. In fact, we must take these responsibilities more seriously than ever before.

By meeting the challenge and embracing the opportunity it presents, we live up to our fundamental belief that all people can learn — and we actively affirm our commitment to the mission of Connecticut's public schools.

Gerald N. Tirozzi

Gerald N. Tirozzi
Commissioner of Education

Meeting the Challenge — 1990

Update: Spring 1991

Meeting the Challenge: Condition of Education in Connecticut *is published every two years. It is designed to provide detailed information and analyses concerning public education in Connecticut and the context within which teaching and learning take place. The report includes in-depth discussions of the state's people and economy, teacher and administrator characteristics, student achievements, programs and school finance. Text, tables and graphs describe a two-year period (July 1, 1988, through June 30, 1990) and identify trends within that period and in relation to preceding years. Thus, the report provides both a historical context and a basis for planning.*

The months following June 30, 1990, saw significant activity — conclusions and beginnings — in several key areas:

- *The Governor's Commission on Quality and Integrated Education completed its work and submitted its report to Governor William A. O'Neill on December 31, 1990.*
- *Conceptual consideration of an urban initiative evolved, in the fall of 1990, into substantive, although still preliminary, planning discussions between committees of the State Board of Education and the Hartford Board of Education.*
- *The Governor's 1991-92 Budget proposed funding and legislation was developed for the 1991 session of the General Assembly to create an entitlement program of comprehensive services to handicapped infants and toddlers (from birth to age 3) and their families.*
- *The State Board of Education received a detailed report on the impact of the Education Enhancement Act of 1986 that demonstrated the legislation's success in meeting its goals through 1988-89.*

The importance of these events makes it essential that the discussion of these topics be updated through the spring 1991 publication date of Meeting the Challenge — 1990. *This chapter provides that update; the balance of the report, which begins on page 1, maintains its focus on the two-year period from 1988 through 1990.*

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Quality and Integrated Education

". . . we must expect and help our students to achieve, knowing as we do so that students become wise and productive citizens when they meet and understand and then value people from cultures, races and genders other than their own. Students benefit, and Connecticut benefits, from the richness of diversity."

This assertion appears in the preface to *Crossing the Bridge to Equality and Excellence: A Vision of Quality and Integrated Education for Connecticut*, the December 31, 1990, report of the Governor's Commission on Quality and Integrated Education. The 28-member Commission had been directed 15 months earlier by Governor O'Neill to "develop specific recommendations for new and/or expanded programs that will promote voluntary and/or cooperative approaches to achieving quality and integrated education throughout the state." Six findings adopted by the Commission provided a focus for its work:

(1) *Educational opportunity cannot be addressed in isolation and every aspect of public policy in every region of the state should be linked in the cooperative enterprise of removing barriers to achievement and of promoting the common ground that strengthens us all as a society.*

(2) *A quality education requires an integrated student body and faculty and a curriculum that reflects the heritage of many cultures.*

(3) *Every student can learn at high levels from a quality and integrated education.*

(4) *A need exists for communities to appreciate and support public education, and for family members and others in the community to involve themselves in the education of Connecticut's youth.*

(5) *Every educator must be trained to teach both a diverse student population and a curriculum that incorporates and honors the diverse cultural and racial heritages.*

(6) *Connecticut needs to attract and employ minority educators.*

Prior to finalizing its report, the Commission held six public hearings (in Bridgeport, Hartford and Winchester on December 4 and in Stamford, Old Saybrook and Windham on December 5, 1990) in order to receive public comment on the preliminary report and its recommendations. The final report was submitted to Governor O'Neill on December 31, 1990. In January 1991, the State Board of Education voted to support the recommendations of the Governor's Commission on Quality and Integrated Education.

Finding 1 of the Commission's final report addresses the underlying causes of isolation and inequity in Connecticut's schools. Recommendations designed to respond to the finding — and live up to its spirit — call for regional efforts "to identify and assess present barriers such as poverty, education, employment, housing, health and transportation which perpetuate inequity, isolation and the lack of greater integration." Regions would be required to develop, implement, evaluate and report progress on cooperative plans of action to address the existing barriers to equity and integration. Thus, achieving quality and integrated education for all is perceived not just as a problem for schools and school districts, but as a challenge — and an opportunity — for a necessary partnership of individuals, communities, regions and the state as a whole. Finding 4, which encourages family and community involvement in education, and the related recommendations reinforce this principle.

Recommendations under Finding 2 address specific actions that would be taken by the State Board of Education (develop by June 1992 "guidelines for an integrated and multicultural school environment"), school districts (develop local standards "consistent with the state guidelines while reflecting local diversity") and the General Assembly ("create and expand and then fund a continuum of educational experiences in the new integrated environment"). Finding 3 — that "every student can learn at high levels from a quality and integrated education" — includes a recommendation that "the Educational Equity Study Committee review current state aid programs to ensure that these programs favor those schools and districts with the greatest financial needs and those students with the greatest educational needs."

Teachers who are able to teach a multicultural curriculum in a diverse student environment will be essential to creating and maintaining opportunities for quality and integrated education. Recommendations under Finding 5 describe ways in which Connecticut teacher preparation programs and the State Department of Education would assist both new and experienced teachers in acquiring the necessary skills. Finding 6 describes approaches to recruiting and retaining minority teachers. Recommendations include establishing, in districts with significant minority student populations, programs to stimulate interest in teaching as early as middle school; providing scholarships to minority students enrolled in teacher preparation programs in Connecticut; and developing regional efforts to recruit and retain out-of-state minority educators.

Urban Initiative

"... a partnership project whose primary mission is to help Hartford students learn at significantly improved levels."

The relative low achievement of students in urban communities is a growing concern. In the late 1980s, statewide mastery test results provided specific information on the nature and seriousness of the problems faced by urban learners and the educators who strive, under difficult circumstances, to provide those learners with an effective educational program. With this knowledge, and consistent with the State Board of Education's intent to direct more resources to districts and students most in need, the Board and Department of Education began to consider possible approaches to a new urban initiative that would focus on these concerns. In the fall of 1990, the State Board formed a committee to meet with a committee of the Hartford Board of Education in order to "begin discussions to explore establishing a partnership for the purpose of increasing the educational performance of students in Hartford."

Whatever specific details evolve through this collaborative effort, the partnership concept itself could serve as a model in working with other urban communities in Connecticut and for similar state/local partnerships throughout the nation. At the core of the concept is this: The State Department of Education will be an active partner with an urban school district, targeting resources and sharing responsibility for helping students achieve at higher levels.

Early Intervention

"... there shall be a comprehensive interagency system to ensure the availability of early intervention services to all eligible infants and toddlers and their families."

As proposed by the State Board of Education and as recommended for funding in Governor Lowell P. Weicker's 1991-92 budget, legislation was submitted for consideration in the 1991 session of the General Assembly. It responds to the conviction that quality programs for developmentally delayed infants and toddlers and their families are essential from birth onward. Currently, school districts are required to provide special education and related services to preschool children from 3 to 5 years of age who have special educational needs. Under the proposed law, eligible children would be entitled, from birth, to a full range of coordinated services "necessary to enhance the development of the child and the capacity of the family to meet the special needs of the child."

The State Board of Education would serve as the lead agency for the Birth-to-Three Early Intervention System, with participation by the Departments of Children and Youth Services, Health Services, Higher Education, Human Resources, Income Maintenance, and Mental Retardation, and the Board of Education and Services for the Blind. The system includes a 15-member interagency coordinating council appointed by the Governor.

A key element of the system would be the development of a written individualized family service plan (IFSP) for providing early intervention services to each eligible child and his or her family. Family members would participate with qualified personnel in developing the plan.

The legislation also proposes a comprehensive "child-find system;" a public awareness program focusing on early identification of eligible infants and toddlers; and a central directory of early intervention services, resources and experts in Connecticut. Regional service coordination centers would be responsible for location, identification, evaluation, initial assessment, IFSP development, and case management.

Passage of this authorizing legislation would confirm the state's commitment to providing early intervention and support to those most in need, and establish a system able to respond to the growing number of Connecticut infants and toddlers who have serious developmental needs.

Education Enhancement Act (EEA)

"The EEA provided a balanced equation: enhanced salaries and toughened standards. This report . . . indicates the goals of the EEA substantially are being met."

The January 1991 report to the State Board of Education on the impact of the Education Enhancement Act demonstrated the success of the three-year Education Enhancement effort (1986-87 through 1988-89). Progress was shown on all of the major objectives of the legislation.

Teacher salaries. The aim of the salary aid provisions of the Education Enhancement Act was to attract and retain high-quality teachers by (1) making teachers' starting and midcareer salaries competitive with other occupations requiring similar training and (2) enabling Connecticut communities to offer educators salaries competitive with those available in other states. With the assistance of EEA funds, the median midcareer salary of Connecticut teachers moved from 10.9 percent below that of comparable occupations in state service in 1985 to 5.5 percent above it in 1989. During the same period, the mean starting salary of Connecticut teachers moved from 21.5 percent below the starting salary of state workers in comparable positions to 4.3 percent below it.

One objective of the EEA was to attract high-quality teachers by raising teachers' minimum salaries to $20,000 in most districts, $21,500 in certain wealthier districts or districts which bordered on two such districts. The district median beginning teachers' salary increased by 30.1 percent during enhancement, from $17,013 to $22,142 in 1988-89, and continued to increase even after full implementation of the program. The median beginning teachers' salary for 1989-90 was $23,859, or 7.8 percent above the 1988-1989 median. Also in 1989-90, beginning teachers in 37 of the 166 school districts earned at least $25,000, while beginning teachers in only 18 districts earned less than $22,000.

Another significant objective of the Education Enhancement Act — a decrease in disparities among Connecticut's school districts in salaries of beginning teachers — also was achieved. Before enhancement, the difference between the salaries of districts in the 90th and 10th percentiles was $4,859 or 33.2 percent. After the first stage of enhancement, the disparity was $2,416 or 13.6 percent. In 1987-88, the difference decreased further to $2,018 or 10.1 percent. However, by the third year of enhancement, 1988-89 the disparity in salaries between districts in the 90th and 10th percentiles was $4,192 or 20.8 percent — higher than the previous year but still substantially below the 1986-87 pre-enhancement level. The dollar and percentage differences in salaries of beginning teachers decreased again in 1989-90, to $4,118 and 18.8 percent.

To retain high-quality teachers in classrooms throughout Connecticut, the Education Enhancement Act also directed funds to assist school districts in raising the salary level of experienced teachers and at the same time to reduce the disparity among districts in average teachers' salaries. The analysis of EEA data indicates that both of these objectives were met.

During the three years of the Education Enhancement Act, the average teachers' salary increased by $8,703 (29.6%), from $29,437 in 1986-87 before enhancement to $38,140 in 1988-89 (the third and final year of the program). The average teachers' salary rose again in 1989-90, to $41,361. That year, the National Education Association reported that Connecticut's average teachers' salary ranked second in the nation to Alaska. The state ranked 13th in 1985-86, 18th in 1983-84 and 20th in 1980-81.

Average salaries by school district also have increased as a result of enhancement. In 1986-87 prior to enhancement, 143 districts had average salaries below $31,000; only 4 had average salaries of at least $37,000. By 1988-89, only 7 districts had average salaries below $31,000, while 55 districts had salaries exceeding $37,000. This trend continued in 1989-90, when only 2 districts had average salaries below $31,000 and more than three-quarters of the state's public school districts had average salaries above $37,000.

The disparity between the 90th and 10th percentile districts in average teachers' salaries decreased from 41.5 percent ($9,331) prior to enhancement to 25.6 percent ($8,261) in the final year of salary enhancement aid (1988-89). In the year that followed, however, the disparity increased somewhat to 27.0 percent.

Staff-pupil ratios. Since the ratio of certified staff members to pupils is an important element in the quality of instruction, the Education Enhancement Act of 1986 provided assistance to districts which needed improvement in this area. Funding was provided to 43 eligible districts to hire a total of 714 full-time equivalent (FTE) staff members below the rank of superintendent over the three years. Of the 714 positions authorized by the law, 435 were in Bridgeport, Hartford, New Haven and Waterbury. The number of eligible positions funded ranged from a low of 1.0 in nine districts to a high of 220.6 in Bridgeport. The enhancement-funded positions accounted for 73.8 percent of the new staff hired in Hartford, 79.9 percent in Waterbury, 80.6 percent in New Haven and 100 percent in Bridgeport.

The ratios of full-time certified professional staff to students improved in 41 of the 43 school districts. The average ratio for these districts rose from 76.4 staff members per 1,000 students in 1985-86 to 85.0 in 1988-89; during the same period, the statewide ratio increased from 81.3 to 87.7. In Bridgeport, the staff-pupil ratio (staff members per 1,000 students) rose from 68.8 in 1985 to 81.9 in 1988. Ratios rose from 74.5 to 83.9 in New Haven and from 82.3 to 87.8 in Hartford. The report to the State Board of Education concluded that the funds made available through the Education Enhancement Act appeared to help districts most in need of improvement to maintain or exceed their previous staff levels at a rate greater than that of the average Connecticut school district.

Professional standards for teachers. The Education Enhancement Act included a number of provisions intended to raise standards for entry into the teaching profession. Connecticut standards now are considered the most rigorous in the country, yet the number of people seeking to enter teaching in Connecticut is the highest of the decade. According to a survey conducted by the State Department of Education, local and regional school districts screened a total of 40,156 applications for advertised positions for the 1989-90 school year. This was substantially higher than the 33,649 applications screened in 1988-89, when districts reported a greater number of vacancies.

In addition, superintendents and deans of education at Connecticut's colleges and universities have indicated that they now have a larger and more talented teacher pool than ever before. Statistical data collected through a variety of assessment methods confirm these conclusions. Results from CONNCEPT (a basic skills test that all prospective teachers must pass as a requirement for certification) show positive trends. These include the following (please note that in 1985-86 and 1986-87, the test was required only for admission to teacher preparation programs in the state; since that time, all candidates for certification have been required to take the test):

- the pass rate for first-time test-takers rose from 55 percent in 1985-86 to 67 percent in 1987-88 and 73 percent in 1989-90;

- the number of candidates who qualified for CONNCEPT waivers (by having a combined SAT score greater than 1,000, an equivalent score on the Prueba de Aptitud Académica, or an ACT combined score of at least 24) rose from 225 in 1985-86 to 1,704 in 1987-88 and 2,194 in 1989-90; and

- the median combined SAT score for test-takers increased from 879 in 1985-86 to 962 in 1987-88 and 968 in 1989-90.

Data also show that the Education Enhancement Act has helped to attract more qualified and more experienced individuals into the teaching profession in Connecticut. Between 1985-86 and 1988-89, the percentage of candidates who are graduate students rose from 10 to 25 percent, and the proportion of teacher education program candidates who are at least 30 years old increased from 10 to 40 percent. In addition, the Alternate Route to Certification (ARC), considered by many to be a national model, has graduated 312 students in three years; approximately half are now teaching in Connecticut schools. Graduates of this program include former lawyers, chemists, engineers, writers, researchers, military personnel, financial analysts, electricians and housewives. The largest and most recent class (summer of 1990) included a geophysicist, an insurance executive, four journalists, two lawyers, three former military officers, two restaurant managers, 13 substitute teachers and 26 teacher aides.

The Future

In the months since the end of the 1989-90 year, the nation has gone to war in the Persian Gulf and has returned to peace. In Connecticut, the new administration of Governor Lowell P. Weicker, Jr., has taken office. The New England economy has continued in recession, deepening the state's fiscal dilemma and energizing the debate surrounding governmental spending and revenue structures.

The transition to the 1990s has many implications for the educational enterprise in Connecticut. The principles and philosophies of education are always affected in practice by the realities of the time; two undeniable realities of the early 1990s are growing demands for services of all kinds, and constraints on the resources required to provide them. The initiatives described here — the recommendations of the Governor's Commission on Quality and Integrated Education, the Hartford Partnership, the Birth-to-Three Early Intervention System and efforts to elevate teaching as a profession — both reflect the need for services and will be affected by the availability of resources. A major challenge of this decade will be to reevaluate and, as necessary, adjust the structuring of education financing in Connecticut.

An additional challenge will be building new structures and developing new methods for ensuring accountability for the effectiveness of educational programs and — most importantly — for the quality of student performance.

In the decade ahead, realities will change, and change again. It is the fundamental principle that will remain the same:

The best possible teachers and the best possible educational environments must be available to all Connecticut learners, all of whom have a right to achieve at the highest possible level — for their future and for ours.

Connecticut: Its People and Its Schools

As we approach the 21st century, the State Department of Education continues to work toward a future in which all students will have the knowledge, skills and understanding to flourish as individuals and contribute as members of the local, state, national and global economy. Many new and continuing initiatives of the Department have enhanced the capability of educators to work toward this future. There are areas, however, which continue to present educators with challenges and opportunities for improving the performance of both schools and students. The recent past has been highlighted by some reductions in the disparity in resources to support students' education among the state's 166 school districts and by significant strides in the ability to attract highly qualified individuals into teaching. The late 1980s also saw increased achievement of elementary pupils, but little or no improvement in the indicators of high school student achievement.

Because changes in the composition of the state's population and its economy affect the context in which education is provided, this chapter provides an overview of the state's people, economy and schools. Subsequent chapters highlight the variety of educational programs administered by the state and local public school districts in Connecticut.

Connecticut's People

Geographically, Connecticut is the third smallest state in the nation. However, with the fourth greatest population density among the 50 states — 659 residents per square mile — Connecticut ranks 27th in total population with an estimated 3,299,000 inhabitants in 1990.

Several major demographic trends begun in recent decades have had increasingly strong effects on the diversity and size of Connecticut's school-age population. Total population is a function of both birthrates and migration.

The state's low overall birthrate is projected to continue and to result in a slow population growth averaging about 0.5 percent annually through 2010. Connecticut's birthrate has consistently been below the national average and, as the nation entered the "baby bust" era of the 1980s, Connecticut's birthrate declined even faster than that of the nation. The number of births rebounded in the "baby boomlet" beginning in the mid-1980s, as the last wave of the baby boom population, which had delayed child rearing for a variety of reasons, started families. Births are expected to peak in the early 1990s before declining gradually through the remainder of the decade.

Connecticut's Population Growth

Year	Total Population (thousands)	Average Annual Growth Rate
1950	2,007	1.7
1960	2,535	2.6
1970	3,032	2.0
1980	3,108	0.3
1985	3,170	0.4
1990 (P)	3,299	0.8
2000 (P)	3,456	1.0
2010 (P)	3,500	0.3

(P) = Projected

Source: Connecticut Office of Policy and Management

In releasing the latest population projections in July 1989, the State Office of Policy and Management noted that the state's three largest cities, after three decades of population loss, are expected to grow through 2010. New Haven is expected to surpass both Hartford and Bridgeport in number of residents by 2010, but Hartford is expected to have the youngest population in the state, with a median age of 23.3 in 2010, about half the state's expected median age in that year. Older surrounding suburbs are expected to stabilize or lose population over the next two decades. The densely populated communities of southwestern Connecticut also are expected to lose population, although they will remain vital economic centers. The greatest relative growth will continue to be in eastern Connecticut. Total growth will be primarily a result of births rather than migration to the state; the high relative cost of housing in the state will hinder a major influx of new residents.

Population projections by age for the next 20 years show the dramatic increase in the number of Connecticut residents

Population in Connecticut 1980-2010

Age Group	1980	1990 (P)	2000 (P)	2010 (P)
0-4	185,188	225,070	204,300	184,180
5-9	205,758	219,390	224,900	187,180
10-19	544,666	405,950	471,920	449,520
20-24	272,382	235,770	206,930	251,090
25-64	1,534,718	1,773,840	1,886,670	1,904,980
65+	364,864	439,030	460,880	522,560
Total	3,107,576	3,299,050	3,455,600	3,499,800

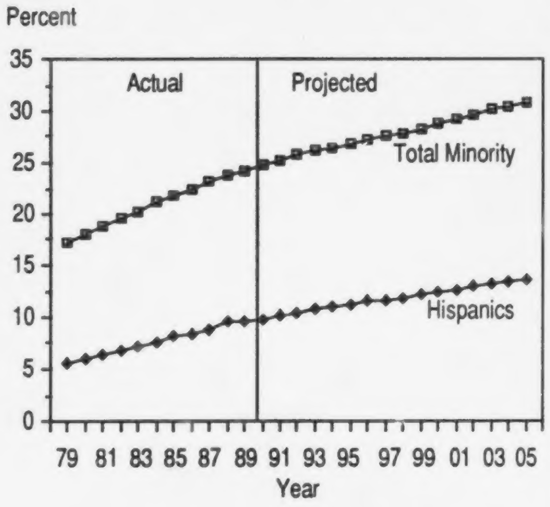
(P) = Projected

Source: Connecticut Office of Policy and Management

65 years of age and older and general overall declines in the number of school-age children. Connecticut's population is the fourth oldest in the nation.

As a result of the low overall birthrate and differential birthrates among the state's populations, minorities (particularly Hispanics) will continue to constitute the fastest growing segments of the population. In a study done in 1983 by the University of Bridgeport, it was estimated that in 1960 there were 15,000 Hispanics in Connecticut. By 1980, when data were first collected on Hispanics in the federal census, the number rose to 124,499. The 1990 census counted 213,116 Hispanic residents of the state, an increase of 71.2 percent in 10 years. Blacks and Hispanics are making up increasing percentages of the school-age population and their proportion is expected to rise further. Currently, minorities represent one in four of the students enrolled in Connecticut's public schools. The State Department of Education projects that minorities will represent 30 percent of the public school enrollment by 2003.

Total Minority and Hispanic Enrollment as a Percentage of Total Public School Enrollment



Source: Connecticut State Department of Education

Changes in family structure which were dramatically reflected in the 1980 census continued through the decade. In 1955, 60 percent of the households in the country consisted of a working father, a housewife mother and two or more school-age children. By 1980, only 11 percent of the households consisted of this structure, and by 2000 only 4 percent of the nation's families are expected to fit this pattern. Continued declines are expected in the number of children per family. Increases are expected in the number of women working full-time outside the home, the number of the state's children who will be raised by a single parent, and the number of children who have no brothers or sisters. These demographic trends have an impact on the number and diversity of students entering school and the types of support services they need.

The number of the state's youngest learners is increasing, and the State Board of Education has as one of its goals "To Ensure Access to Developmentally Appropriate Early Childhood Programs and Services for All Young Children and Their Families."

Numerous studies of young children with special educational needs demonstrate that the earlier we make an investment in programs for these children, the greater the long-term return on that investment will be. Early intervention for developmentally delayed children and children from low-income families is generally recognized to be beneficial. These children have been identified as population groups that without early intervention will require more extensive and longer-term support as they grow older.

In 1989-90, the Department of Education, through the regional educational service centers and Department of Mental Retardation programs, provided early intervention services to approximately 1,000 infants and toddlers (birth to 3 years old) and their families. This was double the number who received services in 1986-87. In addition to locating and assessing children from birth to 3 who are developmentally delayed, local school districts are charged with locating, identifying and providing services to preschool children, age 3-5, who have special educational needs. Special education, speech and language, physical therapy, psychological and other services are available. Approximately 4,800 children with special needs, age 3-5, were served in 1989-90.

Children who come from poverty tend to enter school with a series of deficits and are more likely to be at risk of school failure and subsequently dropping out. Preschool preparation assists in enriching a child's cognitive, social, emotional and health development, and gives poor children a chance at an even start when they enter school. It has been estimated (Business Week, September 19, 1988) that for every dollar invested in programs like Head Start, more than four times that amount is saved in public assistance, special education and other costs. Also, children enrolled in early childhood programs are more likely to graduate from high school and be employed following school completion.

Enrollment in prekindergarten programs in public and nonpublic schools is reported annually to the State Department of Education. A 1985 report to the State Board of Education indicated that of all children in day-care or prekindergarten programs in Connecticut, 73 percent were in licensed day-care centers or group day-care homes, 18 percent were in licensed family day-care homes, 5 percent were in public school prekindergarten programs and 4 percent were in nonpublic school prekindergarten programs. While prekindergarten enrollment reported to the State Department of Education represents only a small percentage of the prekindergarten and day-care programs in operation, the table on page 3 reflects the increases in this

Prekindergarten Enrollment* in Connecticut's Public and Nonpublic Schools

Year	Public Schools	Nonpublic Schools	Total
1989	4,862	3,681	8,543
1988	4,118	3,338	7,456
1987	3,830	2,949	6,779
1986	3,831	2,578	6,409
1985	3,361	2,549	5,910
1984	3,178	2,375	5,553
1983	3,190	2,406	5,596
1982	3,811	1,954	5,765
1981	3,888	1,747	5,635
1980	4,371	1,601	5,972
1979	4,390	1,517	5,907

* Reported as of October 1

Source: Connecticut State Department of Education

portion of the total prekindergarten enrollment over the past decade. The reported 1989 enrollment of 8,543 was the highest ever, with more than half of the students (56.9%) in programs in public schools.

Extended-day kindergarten programs have been shown effective in providing students, particularly low-income students, with an opportunity for a better start on their education. In 1989-90, 39,264 students were enrolled in kindergarten in Connecticut's public schools. Seventeen school districts offered extended-day kindergarten to all children and an additional 21 school districts offered extended-day programs to some children. In 1984-85, only seven districts offered extended-day programs to some children and 10 districts offered extended-day programs to all children. A majority of the extended-day programs are still offered in school districts in the top quartile of wealth.

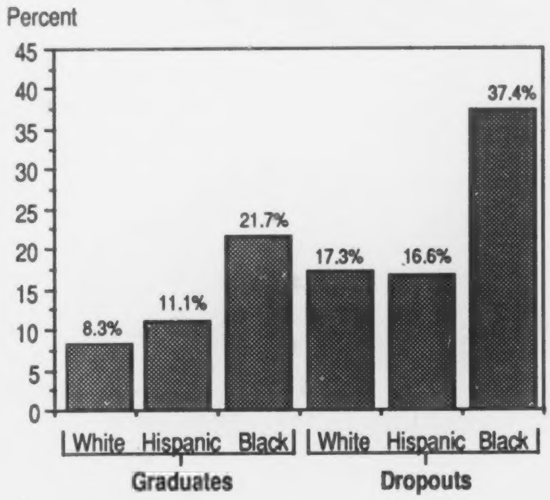
In addition to the very young segment of the population, the state's adult population (age 25 and over) is growing, as the last of the baby boom cohort moves into adulthood. (The baby boom generally includes those born between 1945 and 1964.) The state's median age of 32 in 1980 is expected to rise to 39.4 by 2000 and to 41.5 in 2010, continuing to be one of the highest median ages in the nation.

The State Board of Education's goals of improving and expanding adult education programs and improving skills for future employment respond to the needs of the population and the state's increasingly technical economy. The 1980 census clearly shows the relationship between high school completion and English proficiency. Residents with limited English proficiency experienced an unemployment rate more than double that of those who spoke English well, were more likely to be out of the labor force, and if employed were in lower-paying occupations. An equally strong relationship exists between education and labor force experience. As shown in the graph below, high school dropouts, especially black and Hispanic dropouts, in the nation experienced unemployment rates considerably higher than those of high school graduates. National unemployment rates for young nonstudents in 1988 ranged from 8.3 percent for white high school graduates to 37.4 percent for black high school dropouts.

Many programs are designed to serve undereducated youth and adults and to target students who are economically as well as educationally disadvantaged. These programs address the areas of literacy, remedial skills and occupational training. An estimated 310,000 Connecticut adults over age 25 have completed less than eighth grade and an additional 254,000 have some high school but did not graduate (1980 census). Also according to the 1980 census, an estimated 40,000 out-of-school youth and adults age 18 to 64 in Connecticut had limited English proficiency. Current estimates indicate that up to 56,000 people in the state may be limited English proficient.

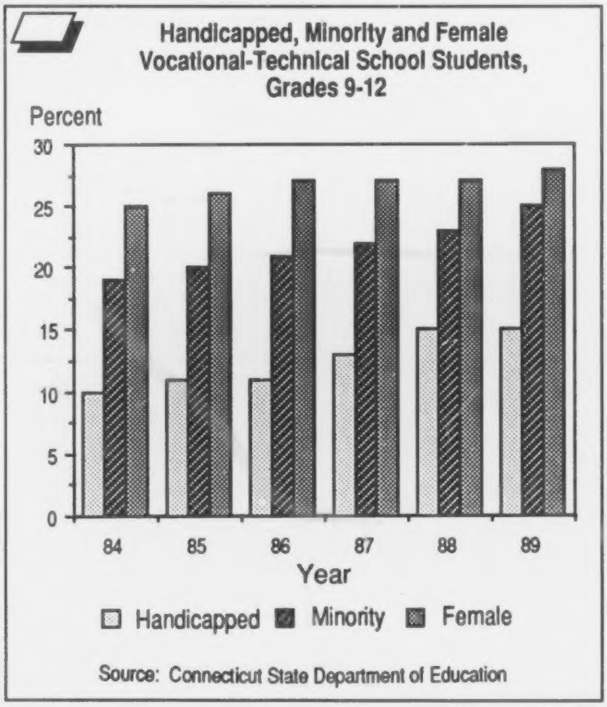
The Department's adult education programs provide instruction and support services in literacy and academic basic skills preparation, English as a Second Language (ESL) and high school completion preparation for anyone over age 16 and out of school. In 1989-90, almost 60,000 adults were enrolled in mandated adult education programs throughout the state, an

National Unemployment Rates of 16- to 24-Year-Old Nonstudents, 1988



Source: Education Writers Association: *First Jobs: Young Workers in a Changing Economy* (1990) increase of more than 16,000 adults since 1984-85. In addition, the State Department of Education funded four programs to provide basic skills education for homeless residents in transitional housing facilities and shelters. The Connecticut Coalition for the Homeless estimates that in 1989-90 more than 18,000 people in Connecticut resided in shelters for the homeless. Their demographic profile was similar to the national profile of the homeless: 70 percent lived in cities and 30 percent lived in small towns; three-quarters were male and one-quarter were female; nearly half were white, 36 percent were black and 19 percent were Hispanic. By age, 18 percent were age 0-17, 80 percent were 18-59 and 2 percent were 60 and above. The coalition also estimates that more than half of the adult homeless in state shelters are in need of basic skills education or literacy training.

The regional vocational-technical school system offers both secondary and adult programs providing specific occupational training in conjunction with high school completion. The vocational-technical school system currently enrolls 8.0 percent of the state's total public school population in Grades 9-12, and has made substantial progress in increasing enrollment of minority, female and handicapped students. From 1984 to 1989, the percentage of females enrolled rose from 25 to 28; the percentage of minority students rose from 19 to 25; and the percentage of handicapped students rose from 10 to 15. In addition to the secondary programs, approximately 9,000 adults are served in long-term, short-term and apprenticeship programs each year.


Handicapped, Minority and Female Vocational-Technical School Students, Grades 9-12

Source: Connecticut State Department of Education

The State Board of Education also serves the vocational rehabilitation and training needs of individuals with mental and physical disabilities. An estimated 58,000 individuals could benefit from the services provided by the Division of Rehabilitation Services (DRS). With current funding levels, the division's vocational rehabilitation programs annually serve approximately 15,000 people, assisting them to become productive and self-sufficient. Vocational training is a major service purchased for clients in the division's effort to prepare them for gainful employment. Services include vocational, college and on-the-job training; evaluation; assessment; therapy; technological aids, devices or rehabilitation engineering; and employment assistance.

Connecticut's Economy

In 1989, the state's per capita income of $24,680 was the highest in the nation. Connecticut's diverse industries, supported by a skilled, productive work force, resulted in robust economic growth during much of the 1980s. The state's technology-based manufacturing firms, broad-based service sector and strong insurance and finance companies provided a wide range of job opportunities for residents. Employment in the state increased by an average of two percent per year from 1980 through 1988. This rapid rate of job expansion was not sustained, however. Job growth slowed in 1989 and into 1990 with substantial realignments in banking, insurance and defense-related manufacturing. Slow job growth is expected to continue into the mid-1990s, with employment increases averaging only 0.5 percent annually.

Even though overall employment growth will slow down, numerous employment opportunities will exist. Jobs become available both as a result of industry growth and the need to replace workers leaving their positions. The latter is especially important in the manufacturing sector, where many production workers are reaching the usual retirement age and others are choosing to retire earlier. Abundant job opportunities, therefore, are expected for skilled and semiskilled factory workers through the mid-1990s, despite projected declines in the overall level of manufacturing employment. Also, Connecticut is the nation's highest per capita exporter of manufactured goods (representing 74,000 manufacturing jobs), and the opening of Eastern European markets should maintain employment in export-related jobs.

Employment gains will continue to be greatest in the service sector, which provides many entry-level jobs offering full-time, part-time, temporary and flexible work schedules, as well as highly paid, high-skill positions. Within the service sector, the health services industry will continue to provide opportunities for job seekers at all levels of experience and training, due to strong job growth and the high number of positions currently unfilled. Other fast-growth areas are legal and business services.

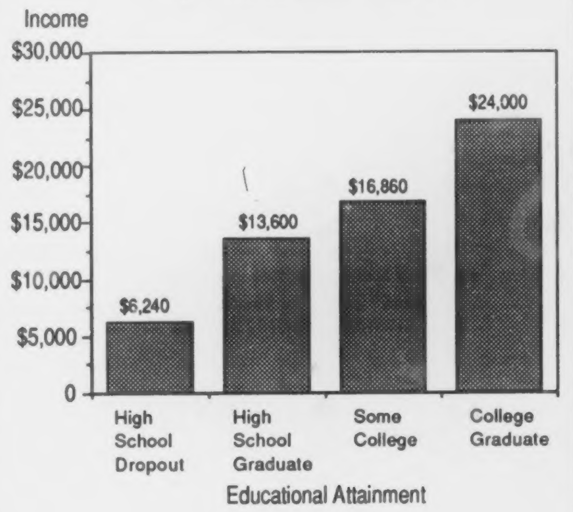
The retail trade sector is also a good source of jobs. While there are numerous low-skill, entry-level positions, with training and experience workers can advance to managerial positions.

The state's unemployment rate of 5.1 percent in August 1990 represents more than 90,000 residents. Many of these individuals lack basic skills or have employment skills no longer needed in the workplace. At the same time, jobs requiring higher-level skills remain unfilled.

One challenge is to sustain some job growth given current demographic trends and their effect on the state's ability to provide an adequate work force, both in numbers and skill level of workers. The last of the "baby boomers" are currently entering the labor market, and as a result of declining birthrates and an increase in the percentage of high school graduates continuing their education, a decline in the number of people directly entering the labor force is expected through the late 1990s. The *Jobs for Connecticut's Future* study (1986) projected that from 1985-95, the labor force will grow only 10 percent while the number of jobs will grow 15 percent. Many Connecticut companies are facing, and will continue to face, labor shortages in particular occupations as a result of the mismatch between the skills employers need and the skills (or lack of skills) of the job seekers.

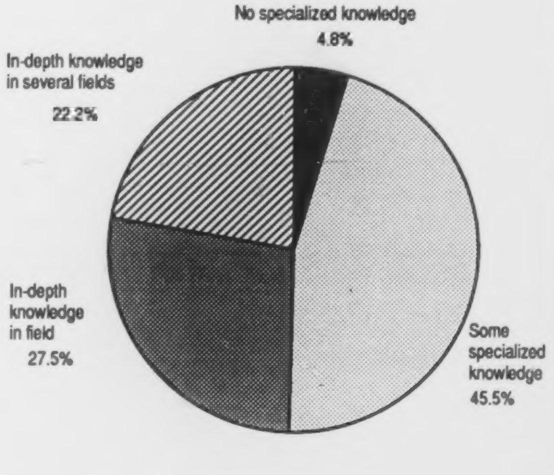
Pervasive throughout the workplace, the application of technology requires an upgrading of the skill level required in most jobs. While in the past the unskilled and poorly educated could get jobs, very few new jobs will be created in the future for those who cannot read, follow directions and use mathematics. Those jobs that are available will offer low wages. In addition, most new and existing jobs in the state will require strong problem-solving, communications and interpersonal skills. The highly publicized report *Work Force 2000* (Hudson Institute, 1987) concludes that the jobs of tomorrow will belong to those "who can read, write and think." Nationally, for the first time in history, a majority of new jobs require some postsecondary education, and prerequisite education requirements are expected to continue to increase. While the median years of schooling required for today's jobs is 12.8 years, 13.5 years will be the median requirement by the year 2000. In addition, educational attainment is closely related to earnings. Young high school graduates finding jobs earn more than double the wages of dropouts. As the graph below left shows, young high school graduates throughout the nation in 1988 earned an average of $13,600, versus $6,240 for high school dropouts.

National Median Annual Earnings of Heads of Young Families by Educational Attainment, 1988



Source: Education Writers Association: *First Jobs: Young Workers in a Changing Economy* (1990)

Specialized Knowledge Necessary For New Jobs Created 1984-1995



Source: *Jobs for Connecticut's Future* (1986)

In addition to projecting the number and types of jobs expected, *Jobs for Connecticut's Future* identified the skill level which will be necessary for new jobs created between 1984 and 1995. Only 4.8 percent of the new jobs will require no specialized knowledge, with almost half (45.5%) requiring some specialized knowledge (for example, licensed practical nurses or secretaries). The remaining half of all new jobs will require either in-depth knowledge in one field (for example, construction trades or accounting) or in-depth knowledge in several fields (engineering and law).

While the state has prospered, all segments of the state's population have not benefited from Connecticut's prosperity. Connecticut boasts the highest per capita income in the United States. According to the 1980 census, however, Hartford is ranked the 4th poorest city in the nation, New Haven the 7th poorest and Bridgeport the 26th poorest. In these three cities, according to the 1980 census, 20 percent of the families live in poverty; 28 percent speak a language other than English at home; and 46 percent are headed by single parents. Students in these cities also have the lowest educational attainment among the state's geographic subgroups (see Chapter 3). According to 1989-90 data, these cities house 13.0 percent of the state's population, 13.4 percent of the state's K-12 students (including 14.4% of the state's K-5 students), 47.8 percent of the state's minority students and 55.1 percent of the state's AFDC recipients age 5 to 18.

Factors related to economic development, housing, zoning and transportation result in many minority families living in Connecticut's poor urban communities. The unemployment rates for minorities and the poorly educated continue to be disproportionally high as a result of the mismatch between the lower skills the unemployed have and the higher skills employers need. In 1989, when the unemployment rate for white Connecticut residents was 3.2 percent, the corresponding rate for blacks was 8.9 percent. The statewide unemployment rates may also understate the problems of the minority population. Many unemployed people remain outside the reported statistics because they are discouraged and feel they would be unable to attain employment and do not actively seek work. Consequently, poverty is a common characteristic of many minority families whose members often lack the education and training to successfully compete for available jobs leading to economic self-sufficiency.

Given the state's demographic and economic trends, Connecticut's ability to continue its overall favorable position in the nation will increasingly depend, in part, on the ability of the educational system to prepare the at-risk population for the technical, high-skill jobs of the future.

Changes in the composition of the work force will continue. In the past, most labor force entrants were between 16 and 24 years old, ending their formal education and beginning careers. With current and projected declines in the relative size of this age group, employers will have to look beyond this group to meet their labor needs. The labor force of the next several decades will consist of proportionately more minorities, women and older workers.

To assist in meeting the education and training needs of the state's workers and employers, the State Department of Education has identified improving skills for future employment as a major goal. A continuum of education programs and support services is provided, from basic skills through advanced occupational training. Some vocational programs are offered on the secondary level at the state's comprehensive high schools, and on both a secondary and adult level at the 17 state-operated regional vocational-technical schools. Vocational education recruitment efforts continue to focus on women, minorities and persons with disabilities. Other programs address the needs of specific populations. For example, the Coordinated Education and Training Opportunities (CETO) initiative provides diverse services to meet the needs of single parents, homemakers, at-risk youth, economically disadvantaged individuals, Job Connection participants, adults in need of training/retraining and individuals needing basic skills and/or a high school diploma.

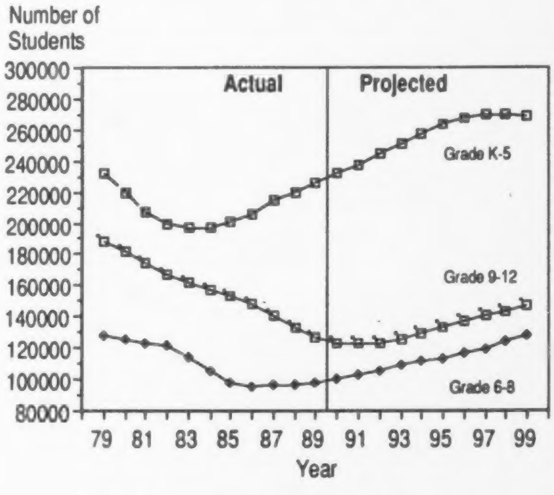
Connecticut's Schools and Students

Public elementary and secondary education in Connecticut is provided primarily by 166 local and regional school districts. In addition, three privately endowed academies — the Gilbert School in Winsted, Norwich Free Academy and Woodstock Academy — serve public high school students. Public school districts in Connecticut are not fiscally autonomous; their budgets are funded and approved as part of the operations of their local communities.

Seventeen state-operated regional vocational-technical schools provide publicly funded secondary education which includes specialized vocational training. These schools also provide programs for adults. In addition, 17 vocational agriculture centers located in public high schools serve students on a regional basis. Many public high schools also operate elementary and secondary school programs for adults that lead to an adult high school diploma. The state's unified school districts are operated by the Departments of Correction, Mental Retardation, and Children and Youth Services for the education of children within their jurisdictions.

To help meet the education and training needs of Connecticut's students and employers, the state's vocational education and rehabilitation network provides a wide range of programs for students who enter the labor force following high school graduation and for those who continue their education. Occupational training programs are offered on a secondary level at most local public high schools, and on both a secondary and adult level at the 17 vocational-technical schools. Annually about 18,000 students complete secondary-level programs which provide occupational training. Programs are established and periodically reviewed based on labor market and student needs. In addition, in 1989-90, the State Department of Education's Division of Rehabilitation Services placed almost 1,900 individuals with disabilities into employment after participation in vocational rehabilitation programs.

Public School Enrollment, Grades K-12
1979-1999



Source: Connecticut State Department of Education

Complementing the state's public elementary and secondary education system are 369 nonpublic schools. This includes 179 Catholic schools, seven fewer than two years ago. There are also 37 Christian Academies, 22 schools with other religious affiliations, 74 independent schools and 57 private special education facilities.

Of the 532,552 Connecticut residents enrolled in the state's elementary and secondary schools in 1989-90, 85.3 percent attended local public schools, 12.6 percent attended nonpublic schools and 2.1 percent attended regional vocational-technical schools.

A major consequence of the dynamics of demographic change in the past decades has been an overall decline in the number of school-age children and in school enrollment. However, some districts, notably large urban areas, have seen an increase in student enrollment, which is creating a serious burden on the delivery of education. Total enrollment in the state's public schools in kindergarten through Grade 12 peaked in 1971 at 675,949 and dropped to a low of 464,565 in 1988. Enrollment rose by more than 1,000 in 1989 and is expected to continue to rise moderately through 1999. The 1999 total projected enrollment of almost 560,000 is almost 100,000 above the 1989 level, but more than 100,000 below the 1971 high.

Highlights from the State Department of Education enrollment projections include:

- Elementary enrollment is expected to increase steadily through 1997, peaking at 269,821, which is 20 percent above the 1989 level.
- Enrollment of minority students is projected to increase from 24.3 percent in 1989 to 30.9 percent of the public school population by 2005. Hispanic students are expected to be the predominant minority group (13.7 percent of the total school enrollment) by 2004.
- High school enrollment, which had declined to 126,870 in 1989, is expected to decrease by more than three percent through 1991, then increase steadily through 2005.
- The decline in the number of high school seniors, which began in 1975, will continue to a low of about 26,600 in 1993, leaving a smaller supply of graduates for colleges and employers.
- Significant numbers of Connecticut students leave school before obtaining a diploma. Between September 1987 and September 1988, 9,958 students left high school, which represents an annual attrition rate of 7.1 percent. If the current attrition rate is projected forward, by 1994 more students could be dropping out of high school than graduating and entering the labor market, exclusive of students continuing to postsecondary education.

As the student population declined through the 1970s and 1980s, there was a corresponding net reduction in the total number of public schools. From 1976 to 1986, a net of 160 elementary schools, 17 middle/junior high schools and 4 high schools closed. By 1987, however, the period of public school building closings had come to an end. From 1988 to 1990, a net of 14 elementary schools were added, reflecting the upswing in the kindergarten to Grade 5 population. A study completed for the Governor's Commission on Quality and Integrated Education (1990) indicated a significant need for elementary school construction through 2000.

Connecticut's commitment to the state's children reflects a continuing effort to reduce the level of disparity in educational opportunities among school districts and to develop high-quality public school programs for all children.

Information on Connecticut's teachers, elementary and secondary education programs, curriculum improvement and evaluation of achievement is provided in subsequent chapters. Implications for various student subpopulations are described below.

The combined incidence of poverty, racial isolation and limited English proficiency presents major challenges to the provision of equal educational opportunities, particularly for children in our urban communities. In the 1989 administration of the Connecticut Mastery Test, white students outperformed black and Hispanic students by a substantial margin in reading/language arts, writing and mathematics. In addition, economically disadvantaged students, as identified by participation in the free or reduced-price school lunch program, generally scored substantially lower than other students. Ten percent of the state's students are in families receiving Aid to Families with Dependent Children (AFDC); this represented 47,277 children in 1989-90.

The State Department of Education, in collaboration with local school districts, has devoted much attention to the challenge of identifying students considered educationally at risk and establishing appropriate programs to respond to their needs. Teen pregnancy, single-parent families, latchkey children and drug and alcohol abuse have all been linked to poor school performance and a high incidence of dropping out of school.

In a survey of Connecticut eighth graders in 1988 (National Education Longitudinal Study — NELS), about one-third of the students were considered educationally at risk, as defined by one or more of the following: (a) from a single-parent family, (b) with parent(s) having no high school diploma, (c) of limited English proficiency, or (d) being a latchkey child left alone for more than three hours per weekday. Black and Hispanic students are about twice as likely as white students to be considered educationally at risk as defined by these circumstances.

The NELS study also indicated that about one of every eight students in the eighth grade (12.9%) reported that student use of illegal drugs was a serious problem in their schools; 13.4 percent reported student use of alcohol was a serious problem, as well. Both sale and use of drugs were considered greater problems by suburban eighth graders than rural or urban students. A further study by the Connecticut Alcohol and Drug Abuse Commission in 1989 found that Connecticut's high school seniors demonstrated a degree of involvement with illicit substances considerably above national rates. This study also found that high school students residing in smaller cities and smaller towns reported higher levels of substance use than their counterparts in large cities. Regular substance use (six or more times per month) was reported among high school students to be highest for cigarettes (20.6%), with significant proportions using alcohol (15.7%) or marijuana (8.5%) regularly.

The main thrust by the State Department of Education to counter this problem has been in infusing substance abuse prevention education into the local school district curriculum. In 1989-90, training was provided for more than 1,000 school personnel in drug abuse prevention education, identification of children using alcohol or drugs and/or at risk for abuse, and appropriate intervention strategies.

Students who are limited English proficient constitute one segment of the state's student population requiring special assistance. In 1989-90, 15,177 students were identified as being of limited English proficiency. Of these, 11,517 are eligible for enrollment in state-mandated bilingual education programs in 1990-91. (School districts must provide bilingual education programs if, in any school, there are at least 20 limited-English-proficient students of the same dominant language.) These students are from 12 local school districts and the Vocational-Technical School System; programs are provided in eight languages. Another 3,660 students were identified to be of limited English proficiency, but their school districts were not required to provide bilingual education programs for them, since there were fewer than 20 such students of the same dominant language in any one school in the district.

The dropout issue has evolved into one of paramount concern to the nation's families, educators and policy makers. The cost of dropping out of school has an impact on the economic fiber of the nation in terms of lost tax revenues and increased welfare and law enforcement expenditures. For the individual dropout, there are harsh economic and social consequences daily.

As reflected consistently in the research, the major factors related to dropping out of school include poverty, poor academic performance and chronic truancy. The consequences of dropping out include difficulty in finding and holding jobs and, when employed, earning less money than high school graduates. Also, a higher proportion of dropouts than high school graduates serve some time in prison. It is estimated that 80 percent of those currently in Connecticut's prisons were high school dropouts.

The State Department of Education is attempting to address this issue. The Dropout Prevention Program, which was incorporated into the Priority School District legislation in 1989, provides funds to 25 school districts for dropout prevention planning programs in Grades K-12, and for target school intervention programs in Grades 4-9. This grant was first implemented in 1987-88. The students who attend schools in these 25 districts represent more than one-third of the Grade 7-12 students enrolled in Connecticut public schools. In 1988-89, 5.6 percent of the students in Grades 7-12 and 8.3 percent of those in Grades 9-12 in the 25 districts dropped out of school. In addition, higher proportions of males and minorities dropped out of school; and the dropout issue extends beyond the urban centers. Among these 25 school districts, the dropout rate in small towns was highest for blacks, while in the large cities Hispanics had the highest rate. Hispanics had a higher dropout rate in medium-size towns than in either large or small towns and cities. The dropout rate for blacks in medium-size towns was proportionately higher than the corresponding rate for blacks in large cities.

Over the past decade, the State Department of Education has rigorously monitored local school districts for compliance with the state's racial imbalance law (C.G.S. Section 10-226a-e).

While minorities represent 11 percent of Connecticut's total population, they represent over 24 percent of the public school enrollment. The percentage of minority students has risen from 17.2 in 1979-80 to the 1989-90 level of 24.3 percent. Minority students are expected to represent over 30 percent of the total public school enrollment by 2003.

From 1979 to 1989, the number of Hispanic students in Connecticut's public schools rose 42.0 percent, while the number of white students declined 25.3 percent and the number of black students declined 3.9 percent. Enrollment of other minority students (Asian Americans and American Indians) more than doubled (+104%) over the same period, reflecting increased immigration and relocation of refugee families.

Fourteen of the state's 166 school districts are home to 30 percent of the state's total student population, 77 percent of the minority student population and 81 percent of the children receiving AFDC benefits. The graduation rates for black and Hispanic students in the state (62.5% and 48.8%, respectively) have consistently been below the graduation rate for white students (currently 83.5%), placing minorities at a strong disadvantage in a labor market which increasingly requires strong cognitive and critical thinking skills.

On the recommendation of the State Board of Education, Governor O'Neill established the Governor's Commission on Quality and Integrated Education in September 1989. The Commission was comprised of distinguished citizens from across the state. It was charged with developing specific recommendations with regard to the problem of racial isolation in Connecticut's schools that would promote voluntary and/or cooperative approaches to achieving quality integrated education in Connecticut. A report on the Commission's recommendations was due to the Governor by December 31, 1990. [*Editor's note: For a discussion of the Commission's recommendations, see the "Update" section of this report. See Chapter 4 for more information about the Commission's work and Department of Education efforts to promote quality and integrated education.*]

This chapter has presented the context within which education occurs in Connecticut, and highlights changes in the state's population, economy, schools and students that have an impact on education. Subsequent chapters provide detailed information on Connecticut's Educators (Chapter 2), Student Achievements (Chapter 3), Programs (Chapter 4) and Finance (Chapter 5). Chapter 6 presents an update on the progress toward implementing the State Board of Education's goals by documenting and interpreting trends in statistical measures identified as Indicators of Success.

Connecticut's Educators

Professional educators — teachers, support staff members, and administrators — are the key resource for improving the quality of public school education in Connecticut. For the past five years, Connecticut has made a strong commitment to ensuring high-quality teachers for all students. The state's education reform efforts have had two major thrusts: (1) increasing the attractiveness of the education profession to individuals making career decisions and (2) improving the quality of professional educators by setting high standards for the preparation, certification and induction of beginning teachers, and the professional development and evaluation of all educators.

The Education Enhancement Act (EEA) of 1986 made teacher salaries more competitive with salaries in other professions. In 1989-90 starting salaries across the state ranged from $20,000 to $28,700. On average, midcareer salaries were in excess of $45,000. As a continuing result of the Act, these higher salaries are now available in Connecticut's less affluent urban and rural districts as well as in traditionally wealthier suburban communities. Improved salaries are providing an incentive for talented educators to stay in the profession, for students to enter teacher preparation programs, and for a limited number of people with strong subject matter backgrounds and other qualifications to enter teaching through the Alternate Route to Certification Program.

Several initiatives to make the preparation of a teacher more rigorous paralleled the enhancement of teachers' salaries. Before entry into a program preparing professional educators in Connecticut, and before receiving initial Connecticut certification to become an educator, candidates first must pass the Connecticut Competency Examination for Prospective Teachers (CONNCEPT). This test assesses educators' knowledge of the essential skills in reading, writing and mathematics. In addition, the state now requires prospective teachers to pass subject-specific testing — the CONNTENT examinations — offered in 23 certification areas. Connecticut also is upgrading standards for teacher preparation, requiring individuals who plan to pursue a teaching career to major in a content-area subject rather than in education. Additionally, the state's college and university teacher preparation curriculums must address the Connecticut Teaching Competencies — a continuum of teacher competencies each teacher must develop to earn a provisional educator certificate. A Cooperating Teacher program is currently in place to provide student teachers with ongoing support, evaluation and feedback during their first classroom experience.

Several new induction initiatives support newly certified Connecticut public school teachers entering the classroom. The Beginning Educator Support and Training (BEST) program provides a mentor to support each beginning teacher in developing and applying the teaching skills outlined in the Connecticut Teaching Competencies. Trained assessors conduct classroom observations during the new teacher's first year of teaching to judge whether that teacher is sufficiently proficient to earn the eight-year provisional educator certificate.

Experienced teachers are granted a professional educator certificate upon the completion of 30 credit hours of additional college-level study in accordance with the requirements of their specific endorsement area, plus three years of successful teaching under Connecticut's provisional educator certificate. The professional educator certificate is valid for five years and is continued upon the completion of nine continuing education units (CEUs). The state's Institute for Teaching and Learning gives educators the opportunity to develop new skills while earning CEUs during each five-year period. State grants to local districts also foster local professional development, career incentives, and teacher evaluation.

A more detailed discussion of these initiatives — known as The Connecticut Continuum: Connecticut's Commitment to the Teaching Profession — appears in Chapter 4.

The data provided in this chapter highlight both the conditions that made the reforms generated by the Education Enhancement Act necessary and the initial findings about the impact of the changes. These data provide statistics which can be used to measure the success of the reform efforts.

Teacher Profile

In 1989-90 there were 43,003 people employed in certified professional positions in the public schools of Connecticut. This includes 39,909 full-time and part-time staff in the state's 166 local and regional school districts, 1,175 in the 17 regional vocational-technical schools, 470 in the regional educational service centers, 247 in the three endowed and incorporated academies, 827 in the state-run special education facilities, and 375 in the three Unified School Districts run by the Departments of Correction, Mental Retardation, and Children and Youth Services. For historical continuity, many of the analyses that follow will concentrate on the 35,772 full-time teachers and support staff employed in the local and regional public schools. Administrators will be profiled in a separate section in this chapter.

The number of full-time staff in the local and regional school districts declined between 1979 and 1983, grew steadily for the five years prior to 1989, and then declined slightly in 1989. The decrease can be attributed to two factors. First, in the late 1980s, there was a leveling off in the hiring of elementary school teachers. During the same period, districts reduced staff at the secondary level where middle and high school enrollments have declined.

The 1989 count of full-time professionals (teachers and support staff plus administrators) in the local and regional public schools, 38,308, is approximately 6.5 percent above the 1983 low, yet 2.3 percent below the 1979 count. The number of special education teachers continues to increase, and with the

Number of Full-Time Staff in the Local and Regional School Districts*

	1979	1983	1989	Percent Change 1979-89	Percent Change 1983-89
General Elementary	12,833	11,280	11,880	- 7.4	+ 5.3
Content Specialist	15,384	13,837	14,707	- 4.4	+ 5.3
Special Education	3,141	3,462	4,392	+ 39.8	+ 26.9
Vocational Education	2,870	2,591	2,166	- 24.5	- 16.4
Support Staff	2,676	2,468	2,627	- 1.8	+ 6.4
Subtotal Teachers and Staff	36,904	33,638	35,772	- 3.1	+ 6.3
Administrators	2,300	2,278	2,536	+ 10.3	+ 11.3
Total Full-Time Professionals	39,204	35,961	38,308	- 2.3	+ 6.5

* From 1979 to 1989, there were many changes in the classification and reporting of staff. The most significant were adding school business official to the administrator category in 1985, classifying teachers of gifted and talented under special education in 1987, adding Region 19 in 1987, and changing the classification of reading consultants from support staff to content specialist or general elementary in 1989.

Source: Connecticut State Department of Education

addition of gifted and talented teachers beginning in 1987 is now 39.8 percent above the level of 10 years ago. The number of administrators, a category which has included school business officials since 1985, has increased by 10.3 percent. Between 1979 and 1989, the number of vocational education teachers declined by 24.5 percent and the number of content specialists (secondary subject area teachers and K-12 teachers in such areas as art, music and physical education) declined 4.4 percent. This underestimates the decline in the vocational education category because 232 consumer home economics and agriculture teachers were classified under content specialist in 1979 but under vocational education beginning in 1980. Both vocational and content area teachers would have been expected to decline as a result of the secondary enrollment decline over that period. However, the shift in graduation requirements beginning with the class of 1988 has triggered an increase in the number of content-area teachers while accelerating the decline in the number of vocational education teachers. The number of educators assigned to support staff positions showed the least change over this 10-year period.

The number of part-time positions increased steadily from 1979 to 1987, then declined through 1989. The 166 local and regional public school districts employed 1,601 educators in part-time positions in 1989-90. This number now represents 4.2 percent of the professional positions, compared to 3.1 percent in 1979.

Female representation in the state's public school teaching force continues to increase. In 1989, about four of five new staff members were women, bringing the total female representation to 67.0 percent, compared to about 60 percent in the late 1970s. One reason for this is the recent growth in areas traditionally dominated by women (elementary and special education) coupled with the decline in the number of vocational education positions, which males traditionally have filled in higher percentages than females.

In 1989, minorities filled 2,411, or 6.3 percent, of the full-time professional positions in local and regional school districts; a decade ago minority representation was 5.2 percent. Today minorities fill less than five percent of the positions in 43 of 68 nonadministrative areas. Minorities filled more than 10 percent of the positions in the following assignments: bilingual (70.8%), low-incidence foreign languages (44.4%), social workers (18.8%), other remedial subjects (14.1%), specialized unlisted assignment (13.7%), other occupational subjects (12.5%) and government/law (11.1%). Although the percentage of minority teachers in Connecticut is less than the percentage of minority students in the state (about one student in four in 1989-90) and below that of minorities in the general population (11.8% according to the 1980 census), it is increasing. Also, the percentage of minority teachers in the state currently is higher than the 5.2 percent of all people with a college degree who are minorities (1980 census estimate).

Trends in the summary statistics on the staffing characteristics of age, experience and educational attainment are affected by changes in the staffing level and district hiring preferences. As the number of teaching positions declines, there is a reduced need for new staff; when layoffs are needed, the least senior staff members are likely to be the first released. Those released are likely to be younger, less experienced and have less formal education than those retained. Generally, Connecticut districts have shown a preference for hiring experienced teachers when they were available. Studies of new and returning teachers found that approximately 50 percent of the teachers hired for September 1986 and 1988 had some prior Connecticut public school teaching experience and an additional 25 percent had out-of-state or Connecticut nonpublic school teaching experience.

Characteristics of Teachers and Support Staff

Year	Mean Years CT Experience	Percent With Advanced Degrees	Mean Age
1989	14.5	76.3	43.7
1988	14.2	75.2	43.3
1987	13.9	75.3	42.9
1986	13.8	75.0	42.6
1985	13.6	74.7	42.2
1984	13.4	74.3	41.9
1983	13.1	73.4	41.4
1982	12.6	72.0	40.8
1981	11.8	70.4	40.1
1980	11.3	69.0	39.5
1979	10.7	67.1	38.9

Source: Connecticut State Department of Education

Between 1979 and 1989, the mean age of the staff increased from 38.9 years to 43.7 years, the mean years of experience in a Connecticut public school increased from 10.7 to 14.5 years, and the percentage of the staff with an advanced degree increased from 67.1 to 76.3. As the staff ages, there are increasing concerns about finding well-qualified teachers to fill the vacant positions created because of a growing number of retirements. Over the past 10 years about 700 educators retired annually. However, in 1989 Connecticut recorded the largest number of retirees (977) since 1973. Since the average retirement age in 1989-90 was 60.8 years, the highest since 1983-84, some of the 1989-90 retirees may be individuals who delayed retirement to take advantage of the higher salaries under the Education Enhancement Act of 1986. In recent years, a larger portion of the state's public school teachers have chosen to teach well after they are eligible to retire.

Staffing Ratios in the Local and Regional Public Schools

Year	Teachers Per 1,000 Students	Support Staff Per 1,000 Students
1989*	75.3	6.1
1988	75.0	6.3
1987	73.6	6.1
1986	71.4	5.8
1985	70.1	5.7
1984	68.8	5.6
1983	67.2	5.4
1982	66.4	5.4
1981	66.2	5.3
1980	65.0	5.2
1979	63.5	5.1

* Changes due, in part, to reclassification of reading consultants from staff to teachers.

Source: Connecticut State Department of Education

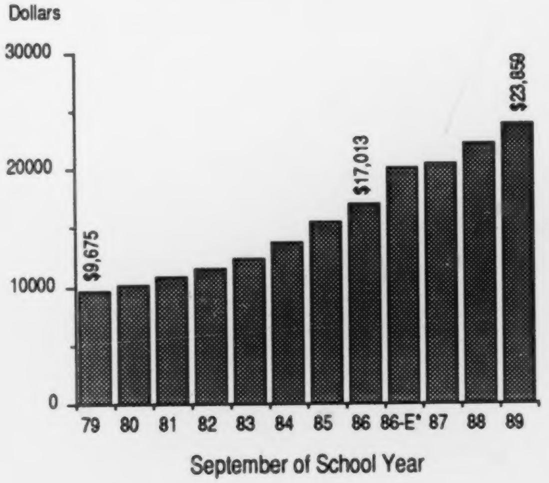
Staffing ratios have increased each year for the past 10 years in Connecticut, although the rate of increase moderated in 1989. Between 1979 and 1989, the number of teachers per 1,000 students increased from 63.5 to 75.3, an 18.6 percent increase. This is equivalent to a decrease in the student/teacher ratio from 15.7:1 to 13.3:1. During the same period, the support staff per 1,000 students improved from 5.1 to 6.1, although the 1989 ratio decreased somewhat from the 1988 high of 6.3 per 1,000. This is equivalent to a reduction in caseload from 196 to 164 students for each counselor, psychologist, social worker and reading consultant in the state. The improvement is due to several factors. First, districts hire in direct response to enrollment increases, but release staff members more slowly as enrollments decline. Second, in secondary schools the breadth and sequence of programs often are maintained even when enrollments decline. The resulting small classes increase the staffing ratio. In addition, parents and teachers have shown a preference for small class sizes in the elementary grades. During periods of declining enrollment, small class sizes were obtained by retaining elementary staff members while enrollments declined.

Compensation

Even before the Education Enhancement Act (EEA) of 1986, starting and average salaries of full-time teachers and support staff in the local and regional public school districts had started to grow at a rate exceeding inflation. By directing funds to the least wealthy and lowest-paying school districts, the Act made it possible for less affluent districts to make significant improvements in their salary schedules.

In a three-year program beginning in 1986, EEA provided approximately $300 million in aid to districts that voluntarily agreed to raise their teachers' minimum salaries to $20,000 by 1988-89. (The designated minimum was $21,500 in towns where the average household income exceeded the state average by 75 percent.) Before EEA, only eight districts had starting salaries of $20,000 or more. In 1986, 91 districts renegotiated their staring salaries to meet the state targets. By 1988-89, all districts reached or exceeded the targeted level.

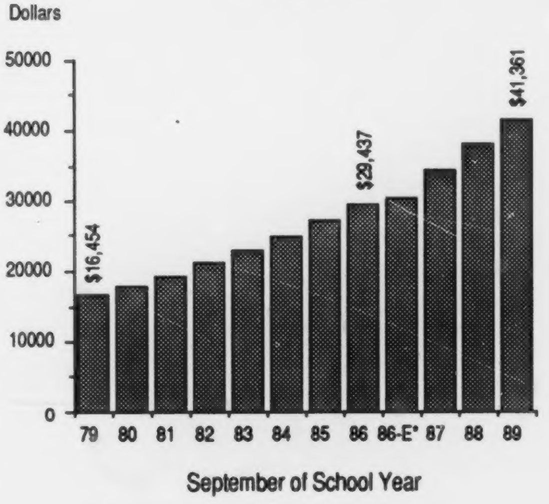
Median Starting Salary of Teachers With Bachelor's Degrees



* Implementation of Education Enhancement Act

Source: Connecticut State Department of Education

Mean Salary of Full-Time Teachers and Support Staff



* Implementation of Education Enhancement Act

Source: Connecticut State Department of Education

In 1989-90, the starting salaries for inexperienced teachers with a bachelor's degree ranged from $20,000 to $28,700. The median starting salary of $23,859 was 40.2 percent higher than the pre-enhancement median of $17,013 and 7.8 percent above the 1988-89 median.

The mean salary paid to full-time teachers and support staff in the local and regional public schools was $41,361 in 1989-90, an increase of 8.4 percent over the previous year. The 1989-90 mean salary was $11,924 (40.5%) higher than the pre-enhancement mean. The 1989-90 median salary for full-time teachers was $43,400. This represents the middle teaching salary in Connecticut, with half of the states' teachers earning higher salaries and half earning lower salaries.

The improvement in Connecticut's teachers' salaries is dramatic compared to the rest of the country. The National Education Association reported that for the 1989-90 school year Connecticut's public school teachers' salaries ranked second in the nation, behind Alaska. Before enhancement, Connecticut salaries ranked seventh in the nation.

Although teachers' starting and midcareer salaries tend to lag behind the salaries paid to state workers in positions requiring comparable education, significant strides have been made in reducing the differential in recent years. In 1989, selected entry-level state positions requiring a bachelor's degree in the area of specialization and no experience ranged from $21,916 for a career trainee to $26,586 for a computer programmer intern,

Teachers' Salaries Compared to Salaries of State Employees — 1989

	Salary	
	1980	1989
Starting Position		
Teacher (Mean BA Minimum)	10,155	23,783
Connecticut Career Trainee (Bus. Admin., Accounting)	12,286	21,916
Computer Programmer Intern	15,774	26,586
Engineer Intern	15,033	25,339
Social Worker Trainee	11,850	24,006
Clinical Nurse	14,311	26,459
Midcareer		
Teacher (Mean MA Maximum)	19,025	42,934
Senior Accountant	22,812	42,137
Civil Engineer	21,808	40,257
DP Systems Analyst I	25,001	38,771
Librarian	18,920	35,641
Personnel Officer II	25,984	47,555
Social Worker	19,799	36,569

Source: Connecticut State Department of Education

compared to $23,783 for the average starting teacher's salary. In 1980, the computer programmer intern's salary was 55.3 percent higher than the mean beginning teacher's salary; by 1989, the programmer intern's salary was only 11.8 percent higher than the mean beginning teacher's salary.

The salaries paid after 10 to 12 years of state experience in 1989 ranged from $35,641 for a librarian to $47,555 for a Personnel Officer II, compared to an average $42,934 for public school teachers with a master's degree at maximum. The Personnel Officer II's salary in 1989 was 10.8 percent higher than the mean experienced teacher's salary, compared to 36.6 percent higher in 1980.

The gap between teachers' salaries and those of selected state employees has narrowed since 1986-87. Salaries have continued to increase beyond 1988-89, the final year of enhancement, which has been reflected in contract agreements and binding arbitration awards granting salary increases above the annual inflation rate for the past four years.

Administrator Profile

In 1989-90, there were 2,536 full-time administrators in Connecticut's local and regional school districts. This represents 6.6 percent of the entire professional staff. The "typical" administrator is a 48.7-year-old white male with a 6th-year certificate, 20.8 years of combined teaching and administrative experience in Connecticut and a salary of $61,445.

From 1979 to 1986, the ratio of full-time-equivalent administrators (which includes teachers with partial administrative responsibilities such as unit leader or department chairperson) increased from 6.1 to 7.8 administrators per 100 teachers and support staff. This figure declined to 7.6 for the 1989-90 school year, reflecting an increase in hiring nonadministrative staff members across the state's public school districts.

In recent years, the proportion of female administrators increased steadily to the 1989-90 high of 30.7 percent, which was nearly double the percentage during the 1981-82 school year. Minority representation increased from 5.8 percent during the 1981-82 school year to 7.1 percent for 1989-90, remaining fairly stable over the last four years.

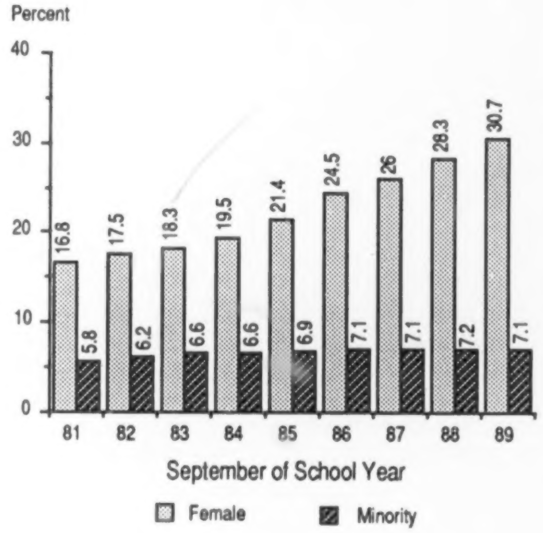
Ratio of Administrators to Staff

September of School Year	Number Full-Time Administrators	Full-Time Equivalent Administrators Per 100 Nonadministrators
1989	2,536	7.6
1988	2,501	7.7
1987	2,395	7.6
1986	2,375	7.8
1985*	2,360	7.8
1984	2,260	7.0
1983	2,278	7.2
1982	2,287	6.7
1981	2,308	6.5
1980	2,328	6.4
1979	2,300	6.1

* School business officials were classified as administrators beginning in 1985.

Source: Connecticut State Department of Education

Percent of Female and Minority Administrators



Source: Connecticut State Department of Education

Testing Prospective Teachers

The Connecticut Competency Examination for Prospective Teachers (CONNCEPT) was designed to ensure that prospective teachers are competent in the areas of reading, writing and mathematics. It is the first step in a teacher licensure process that also includes a subject knowledge test and clinical assessment. The CONNCEPT was first administered in October 1985 and is now given four times annually.

Passing CONNCEPT has been a prerequisite for formal admission to a teacher preparation program in Connecticut since January 30, 1986, and has been required for certification since May 1, 1987. In 1989-90 there were 5,426 first-time participants in CONNCEPT, 2,194 (40.4%) of whom received waivers because their SAT combined scores exceeded 1,000, their ACT combined score equaled or exceeded 24, or their Prueba de Aptitud Académica (PAA) score was equivalent to a score of

1,000 or more on the SAT. Of the 3,232 who were required to take the examination, 72.8 percent passed, representing a 6.2 percent increase from 1987-88 and bringing the combined pass and waiver rate to 83.8 percent. The number of first-time test-takers who fail the test has declined steadily over the last five years from 37.1 percent failing in 1985-86 to only 16.2 percent failing in 1989-90.

Between December 1988 and December 1990, the state phased in subject-specific testing in 23 certification areas. In addition to meeting the CONNCEPT requirement, individuals seeking teacher certification in 22 subject areas must meet the CONNTENT requirement by passing the National Teacher's Examination (NTE) in the areas they plan to teach prior to receiving their initial teaching certificate. In the 23rd area, elementary education, prospective teachers must pass the Connecticut Elementary Certification Test (CONNECT), a test developed in-state and piloted in July 1990. Prospective teachers seeking elementary education certification in Connecticut on or after December 1, 1990, will be required to pass CONNECT.

The Beginning Educator Support and Training (BEST) program is Connecticut's induction program for new teachers. The program supports the beginning teacher by providing a mentor to serve as a professional role model, resource and peer coach. The mentor helps the beginning teacher to develop and apply the teaching skills outlined in the Connecticut Teaching Competencies. Six trained assessors conduct classroom observations during the new teacher's first year of Connecticut public school teaching in order to judge the beginning teacher's proficiency in 10 Connecticut Competency Instrument (CCI) indicators measuring various aspects of classroom performance. During the 1989-90 school year, 138 beginning teachers were assessed under the BEST provisions; 117 (85.6%) mastered all 10 CCI indicators and were eligible for provisional educator certification. An additional 20 beginning teachers mastered at least five of the indicators. These teachers are eligible for a one-year extension of the initial educator certificate and a second year in the BEST program. Only one beginning teacher mastered fewer than five of the CCI indicators, making the teacher ineligible for an extension or second year in the BEST program.

Professional Development

Changes in certification requirements as of July 1, 1989, link continuing certification to ongoing professional development. Under the former certification requirements, the state granted a new teacher who had completed the appropriate course work a 10-year provisional certificate. Within the 10-year period, the teacher had to complete 30 semester hours of college-level instruction and three years of successful teaching to qualify for a standard certificate. Once the teacher obtained the standard certificate, there were no additional professional development requirements for maintaining it.

The new certification continuum addresses the issues of continuing education for experienced teachers as well as rigorous assessment for beginning teachers. The professional educator certificate, which replaces the standard certificate, is continued every five years contingent on the completion of Connecticut's professional development requirement of nine continuing education units (CEUs).

The State Board of Education has made a major commitment to ongoing and systematic professional development. The centerpiece of this effort is the Department of Education's Institute for Teaching and Learning. This program began in the summer of 1984 with a budget of $500,000. Twenty-four courses in a variety of instructional areas were offered to 600 teachers. In 1989-90, the Institute offered 139 courses to 2,780 professionals, operating with a $1.56 million budget.

The Institute for Teaching and Learning offered a series of institutes, workshops and conferences throughout the 1989-90 school year and during the summer in six different formats: training, awareness, team building, seminars, residential and the Connecticut Collaboration for Teaching the Humanities. Many of the offerings were subject area specific, while others emphasized early childhood education, writing, thinking skills, technology, special needs, instructional leadership, and culture, equity and student life.

The Institute also offered the Connecticut Principals' Academy. In 1989-90, the Academy attracted 1,200 principals and teacher/principal teams to varied activities emphasizing school change. Programs addressed issues such as school-based management and staff empowerment, bias-free schools, student assessment, and the principal evaluation process.

The Celebration of Excellence honored creative teachers and recognized their innovative curricular achievements. Through this effort, the state provided funds to replicate excellent curriculum programs throughout the state.

Cooperating teachers and mentor teachers play a significant role in the training of new entrants to the teaching profession in Connecticut. To support student teachers and beginning teachers during their first classroom experiences, Connecticut invested $5 million in the training of cooperating and mentor teachers in 1989-90.

In addition, the state invested $1 million in Professional Development Grants to 160 local and regional school districts in 1989-90. The purpose of this grant program was to assist local and regional school districts and regional educational service centers in strengthening the teaching profession through the design and implementation of comprehensive professional development programs. There were also numerous professional development activities funded at the local school district level. In 1989-90, districts reported spending $34.0 million or 1.1 percent of their budgets on the improvement of instruction. This is twice the amount reported five years ago.

Federal funds from the Carl D. Perkins Vocational Education Act in the amount of $250,000 supported a wide range of preservice and in-service programs for 5,173 vocational education teachers, counselors and administrators. The programs were designed to provide professional development and technical courses for certification and to increase the competence of the vocational education professional staff. Special emphasis was placed on the integration of disadvantaged students and students with disabilities in regular vocational education courses.

Supply and Demand

Over the past 10 years, Connecticut has expanded its research efforts to assess teacher supply and demand from simply monitoring numbers of teachers to examining their quality and distribution throughout the state. Recent reform efforts to increase salaries, test teachers prior to certification and open alternate routes to the teaching profession have made the monitoring of supply and demand more complex. The challenge of the future will be to develop models to assess the impact of each initiative on the state's ability not only to attract a sufficient number of people to the profession but to guarantee that children in all districts will have high-quality teachers.

The annual need for new teachers depends on teacher turnover (the number of teachers who leave public school teaching either temporarily or permanently), the change in the number of positions in response to enrollment changes, and the addition of new positions for new programs. Between September 1988 and September 1989, the turnover in full-time and part-time positions in the state's public schools was 2,098 professionals or 5.8 percent of the 1988-89 staff. This included 1,864 (5.2%) of the 1988-89 staff who left the Connecticut public schools, along with 234 who moved from one Connecticut public school district to another. Special education continues to have the highest turnover rate (9.8%), while elementary teachers (5.4%) and support staff (5.5%) had relatively low turnover rates for the 1989-90 school year. Of the staff members who left teaching, 416 were eligible for regular retirement and, as a result, were unlikely to return to public school teaching in the future. The remaining 1,448 "leavers" enter the state's "teacher reserve pool." If they behave like past "leavers," about 30 percent should return to Connecticut's public school work force.

In 1989, "newly hired educators" (individuals not employed in professional positions in Connecticut public schools at the beginning of the previous school year) filled 2,273 positions. Former Connecticut public school teachers resuming their careers after an interruption filled more than half (1,168 or 51.4%) of these positions. Inexperienced teachers or experienced teachers with no Connecticut public school experience who had taught in Connecticut nonpublic schools or schools in other states filled the remaining 1,105 positions.

Attrition, which includes retirement, is a key component in projecting the future demand for teachers in Connecticut. It varies by the age and gender distribution of teachers as well as by subject area or field. Historically, younger educators who are more likely than their older midcareer colleagues to change careers, move, get married or start families have had relatively high attrition rates of 12 to 15 percent. Midcareer educators (35 to 50 years of age) have had the lowest attrition rates, between 2 and 3 percent. Then attrition rates increase as veteran teachers approach retirement age. Compared to those of men, attrition rates for women are higher when they are younger and lower when they are older.

Connecticut currently is experiencing low attrition with an "aging" teaching staff. In the past 10 years, the average age of a Connecticut public school professional increased from 39.5 years to 43.7 years. This has been due, in part, to the reduced hiring of many inexperienced staff members who tend to have higher attrition rates than individuals in the 35 to 50 age group. As a result, the state's professional education staff has aged into midcareer, a point in their careers when few people leave. However, over the next decade the state may face another aspect of an aging professional staff — a modest increase in the number of retirees.

Integrating attrition, policy incentives and district hiring preferences into a model estimating Connecticut's demand for new teachers indicates that the state will need to fill approximately 3,000 positions annually over the next 10 years. Since teacher certification is subject area specific, the need for new teachers will vary by assignment. It is expected that the annual need for new administrators and support staff will remain fairly constant, at approximately 200 and 230, respectively. As elementary enrollments decline, the number of new elementary teachers needed annually will decrease from nearly 1,000 in 1990 to 700 at the turn of the century. Concurrently, the number of new secondary school teachers needed will increase from 650 to 850, reflecting higher secondary school enrollments.

Connecticut's annual supply of new teachers is much broader than the number of new college graduates majoring in education from teacher preparation programs in the state. It also includes graduates with subject-area majors and a minor in education, out-of-state graduates, experienced Connecticut public school teachers who have interrupted their careers, and experienced teachers from Connecticut nonpublic schools or out of state. There is no one supply index that measures the availability of this broad group of teachers. The key index used, which provides an underestimate of supply, is the number of first teaching certificates that Connecticut awards annually.

In 1988-89, Connecticut awarded 2,931 certificates to people being certified in the state for the first time. During the 10-year period that the Department of Education has tracked the number of first certificates awarded, the total ranged from a high of 3,849 in 1985-86 to a low of 2,810 in 1987-88. The peak in 1985-86, followed by a sharp decline in the number of first

Percentage of Those First Certified Who Are Hired

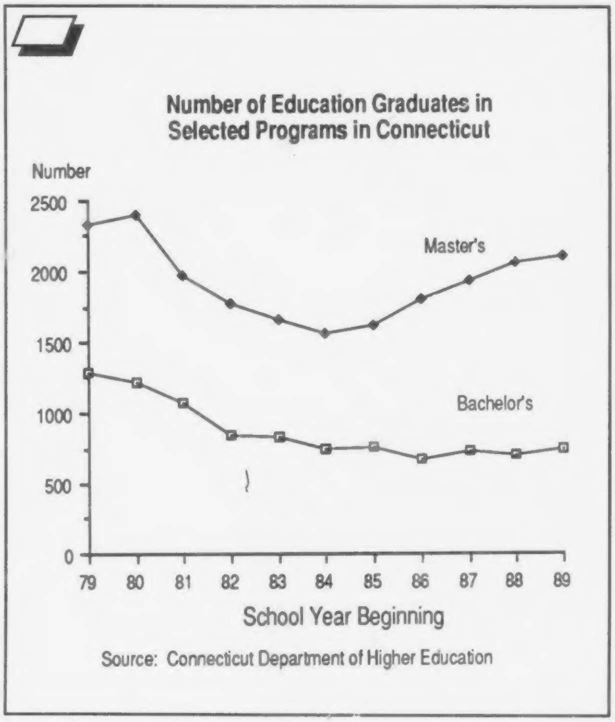
Year September 1 to August 31	Number of First Certificates	Employed the Following September 1	
		Number	Percent
1988-89	2,931	783	26.7
1987-88	2,810	916	32.6
1986-87	3,387	999	29.5
1985-86	3,849	1,015	26.4
1984-85	3,346	1,006	30.1
1983-84	3,117	826	26.5
1982-83	2,875	651	22.6
1981-82	3,001	649	21.6

Source: Connecticut State Department of Education

certificates awarded, is believed to be related to the implementation of the CONNCEPT program in May 1986.

While the number of individuals first certified has declined annually in recent years, the size of the subgroup of individuals who actively seek teaching, support or administrative positions in the state is believed to have changed little. Approximately one-fourth (26.7%) of the individuals certified in the year prior to September 1989 secured certified professional positions in the state's public schools that September. The percentage of prospective educators employed in a public school position within one year of certification has ranged from 21.6 percent in 1981-82 to 30.1 percent in 1984-85. The supply of those first certified appears to be sufficient to meet Connecticut's current and short-term demand for public school teachers, although spot shortages in some subject areas and districts may be anticipated.

The state's colleges and universities are a major supplier of educators for Connecticut's public schools. Many current graduates of Connecticut's higher education institutions (including education majors receiving their bachelor's degrees, students not previously certified who earned master's degrees in education, and other individuals majoring in subject areas with a minor in education) are eligible for certification upon completing their degrees. In 1989-90, the number of education majors earning bachelor's degrees from Connecticut's colleges and universities increased from the 1988-89 total of 694 to 748, a figure essentially unchanged from that of 1984-85; 10 years ago the figure was 1,292. The number of students earning master's degrees in education was 2,099. This is 45 more than the 2,054 awarded in 1988-89 and 545 more than the low of 1,554 in 1984-85, but still below the 2,325 awarded 10 years ago.

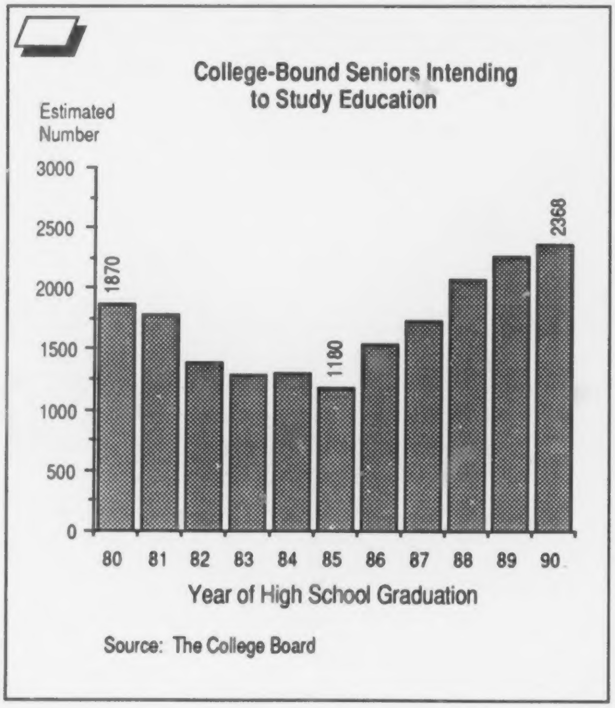


Number of Education Graduates in Selected Programs in Connecticut

Source: Connecticut Department of Higher Education

The number of first certificates issued to current college graduates declined constantly from 1981 through 1988. Connecticut colleges and universities supplied 1,409 candidates for first certificates in 1980-81; the number decreased to 571 by 1987-88. Since that 1987-88 low, there has been a marked increase in the number of first certificates awarded to graduates of Connecticut's colleges and universities, to 961 in 1989-90 (21.3 percent of all first Connecticut certificates issued), reflecting renewed interest among the state's college students in Connecticut public school teaching careers. It should be noted, however, that over the last five years recent in-state graduates continued to account for a constant proportion of the first certified pool — slightly less than one-fourth of the individuals awarded first certificates annually. While the number of first certificates issued in most subject areas increased in 1989-90 over previous years, significant decreases were found in foreign languages, mathematics, physical education, special education, business education and industrial arts.

For the last five years, the number and percentage of Connecticut's college-bound students (those who take the Scholastic Aptitude Test) indicating their intention to prepare for a career in education has increased substantially. An estimated 2,368 high school seniors (9.1%) from the Class of 1990 indicated they planned to study education. This number is 102 (4.5%) higher than the previous year. In the past 10 years there has been a 29.7 percent increase in the estimated number of female college-bound seniors indicating intentions to study education and a 10.3 percent increase in the number of males indicating such intentions. For the 17 years that the College Board has collected data on college-bound seniors' intended field of study, the Class of 1990's level of interest in studying education is second only to that of the Class of 1975 (9.2%).

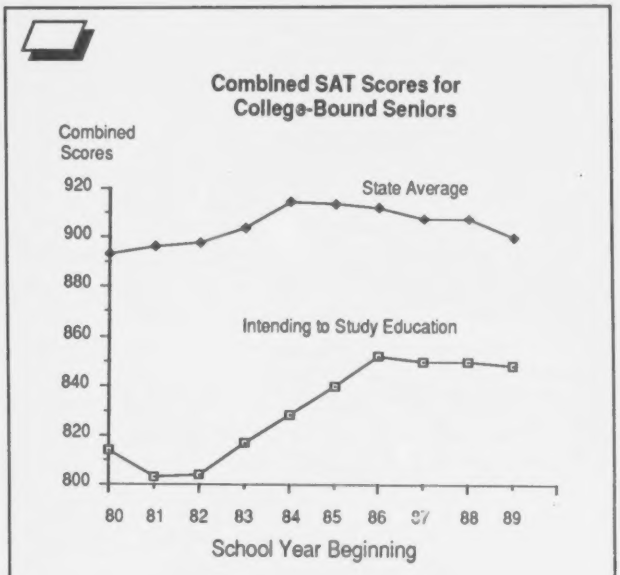


College-Bound Seniors Intending to Study Education

Source: The College Board

SAT scores of students intending to study education in college and the CONNCEPT results are two indicators of the qualifications of new classroom teachers. Now that data are available on the clinical assessment and subject area testing components of Connecticut's teacher certification program, the state will have a broader set of indicators of new teacher quality.

After increasing dramatically since the early 1980s, the combined SAT scores of students who indicate they are interested in studying education (not necessarily those who actually pursued education programs) declined from 852 in 1986-87 to 848 in 1989-90. During the same period, combined SAT scores for all college-bound students declined from 912 to 900. Although the scores of students intending to study education have improved since their 1981-82 low of 803 and the differential between students who intend to study education and all students has been reduced, SAT scores of students preparing for careers in education continue to lag behind the scores of all college-bound students (in 1989-90, by 52 points).


Combined SAT Scores for College-Bound Seniors

Source: Connecticut State Department of Education

An analysis of the SAT scores of students who took CONNCEPT during 1985-86 and 1986-87 verifies that students who were seeking admission to teacher preparation programs in Connecticut at that time did have low SAT scores compared to other college students. For that two-year period, 19.3 percent of the students participating in CONNCEPT had combined SAT scores below 800, while 18.8 percent had combined SAT scores of at least 1,000. The median combined SAT score for CONNCEPT test-takers in 1985-86 was 879; in 1986-87, the median score was 884.

In addition to students seeking admission to teacher preparation programs in Connecticut, the 1989-90 CONNCEPT participants included all individuals taking the examination for teacher certification in the state. For this broader pool of participants, the proportion with combined SAT scores below 800 was lower, 5.7 percent, while the proportion with combined SAT scores of at least 1,000 was much higher, 41.1 percent. The median combined SAT score for the 1989-90 CONNCEPT participants was 968. With the majority of prospective teachers with low SAT scores failing CONNCEPT and thus being denied entrance to college preparation programs and certification to teach in the state's public schools, the SAT scores of teachers who eventually enter the classroom are likely to be well above the average score for the recent pool of all college-bound seniors in Connecticut.

Connecticut has taken a proactive stance in addressing the problem of a perceived or real decline in teacher quality and the decline in the number of individuals interested in public school teaching careers. The comprehensive program of teacher salary enhancement coupled with increased standards for preparation and certification will ensure that talented individuals consider Connecticut public school teaching careers. The new standards guarantee that all individuals who enter the profession in Connecticut will have knowledge of basic skills, comprehensive subject area knowledge and demonstrated pedagogical skills. These standards also ensure that those who remain in education will continue to develop professionally.

Student Achievements

Achievement test scores are an indicator of student success, and are therefore one way to measure the extent to which Connecticut public schools are achieving the goals of educational equity and excellence. Test results help to answer five questions:

- How well are Connecticut students achieving the established educational objectives?
- How many students need remedial assistance?
- How do the accomplishments of today's students compare with those of students in previous years?
- How do Connecticut students compare to students nationally?
- What are the patterns of student performance by variables such as race, gender and Educational Reference Group (a classification system based upon socioeconomic status and indicators of need)?

Connecticut has a statewide testing program that provides answers to all five questions. The Connecticut Mastery Test (CMT) program, initiated in the fall of 1985, is designed to monitor the achievement of students at Grades 4, 6 and 8 in language arts and mathematics. The results are released statewide for students in all districts. In addition, the Connecticut

Assessment of Educational Progress (CAEP), which operated from 1971-1987, monitored the progress of a statewide sample of students in their acquisition of knowledge in specific subject areas and their ability to apply that knowledge.

The progress of Connecticut students is also compared to that of students nationwide. For example, in order to determine how well the average student in Connecticut performs compared to a national sample of students, the Connecticut Mastery Test has been statistically linked to items on a nationally norm-referenced test. In addition, Connecticut participated in the 1990 Trial State Mathematics component of the National Assessment of Educational Progress (NAEP). This program assessed the mathematics skills of a representative sample of Connecticut students in Grade 8. The results are scheduled to be released in mid-1991 and will provide an indication of how Connecticut students compare to students across the nation.

Connecticut has begun the development of an assessment of the skills in Connecticut's Common Core of Learning (CCL). The CCL assessment will focus on the skills and attitudes Connecticut's students should attain prior to graduation from high school. This program will begin testing students in 1992.

In addition to test scores, Connecticut monitors the progress of its students on other performance indicators. These include patterns of courses taken, high school graduation rates, the activities of students after they leave school, and the achievements of adult learners. In order to monitor progress in achieving equity, much of the data is collected and analyzed by race, gender and Educational Reference Group. This chapter describes the current status of Connecticut students on a number of indicators.

Connecticut Mastery Test

The Connecticut Mastery Test (CMT) program was initiated in the fall of 1985, when the fourth grade test was administered for the first time. This was followed in fall 1986 by testing of fourth, sixth and eighth grade students. Administered each fall to students in these grades, the purpose of the CMT is to measure learning outcomes that most students can reasonably be expected to master by the end of Grades 3, 5 and 7.

The Connecticut mastery tests enable and promote:

- early identification of students who may need remedial assistance;
- monitoring of student progress over time;
- testing of a comprehensive range of academic skills; and
- raising standards of student achievement.

Mathematics results. The average number of mathematics objectives mastered and the percentage of students above the remedial standard rose in small but steady increments each year between 1986 and 1989. There is evidence of consistent student strength in the areas of computation with whole numbers and easy one-step mathematical applications at all three grade levels. However, test results also point to student weaknesses in higher-order objectives involving more than routine conceptual understanding or simple skill applications. For instance, students have difficulty when asked to rename whole numbers by regrouping, to estimate answers, to solve problems with extraneous information, and to solve problems that require organizing data. Additionally, students in Grades 6 and 8 are consistently weak on objectives involving fractions and decimals.

Connecticut Mastery Test
Statewide Results in Grades 4, 6 and 8

MATHEMATICS

	Average Number of Objectives Mastered			Percent of Students At or Above Remedial Standard		
Year	Grade 4	Grade 6	Grade 8	Grade 4	Grade 6	Grade 8
1989	20.6	24.1	25.3	87	83	88
1988	20.5	23.8	25.1	86	82	86
1987	20.4	23.7	25.0	86	82	85
1986	20.1	23.1	23.7	84	81	83
1985	19.3	—	—	80	—	—
	Number of Objectives			Remedial Standard		
	25	36	36	69 items correct of 100	79 items correct of 144	78 items correct of 144

Source: Connecticut State Department of Education

Language arts results. Results of the Degrees of Reading Power test (DRP), a holistic measure of reading comprehension, show that in 1989 the average DRP scores for students in Grades 6 and 8 surpassed the statewide reading goal, while the average score for Grade 4 is progressing toward the state goal. The number of DRP units identified as the state goal (for example, 62 for Grade 8) represents the level of materials typically used and appropriate to that grade level. The average score of 63 for Grade 8 suggests that the typical Connecticut eighth grade student can read and comprehend materials normally used in Grade 8 with minimal instructional assistance. The percentage of Connecticut students in Grades 4, 6 and 8 reading at or above the remedial standards for their grade ranged from 72 to 80 percent in 1989.

Reading ability is also measured by assessing students' ability to literally comprehend written prose, as well as their ability to make inferences and evaluative judgments based on written prose. Since 1986 students across the grade levels have shown weaknesses on the higher-order objectives of inferential

Connecticut Mastery Test
Statewide Results in Grades 4, 6 and 8

READING

	Degrees of Reading Power Mean Scores			Percent of Students At or Above Remedial Standard		
Year	Grade 4	Grade 6	Grade 8	Grade 4	Grade 6	Grade 8
1989	47	57	63	72	76	80
1988	47	57	62	71	75	77
1987	45	56	62	75	73	77
1986	44	55	61	72	69	73
1985	43	—	—	68	—	—
	Reading Goal			Remedial Standard		
	50 DRP Units	56 DRP Units	62 DRP Units	41 DRP Units	50 DRP Units	55 DRP Units

Note: DRP standards are based upon the following comprehension levels:

70% at Grade 4
75% at Grade 6
80% at Grade 8

Source: Connecticut State Department of Education

Connecticut Mastery Test
Statewide Results in Grades 4, 6 and 8

LANGUAGE ARTS

	Average Number of Objectives Mastered		
Year	Grade 4	Grade 6	Grade 8
1989	6.3	7.4	8.0
1988	6.2	7.9	7.7
1987	6.2	8.0	7.7
1986	6.1	7.5	7.5
1985	6.1	—	—
	Objectives		
	9	11	11

Source: Connecticut State Department of Education

and evaluative reading comprehension. Students have performed reasonably well on the other language arts objectives of writing mechanics, study skills and listening comprehension. For Grades 4 and 8, the average number of language arts objectives mastered has increased or stayed the same each year since the first administration of the CMT; however, Grade 6 performance on the language arts test peaked in 1987 and is now back to the approximate level it was in 1986. (Please note: There is no remedial standard attached to the language arts objectives.)

All students in Grades 4, 6, and 8 submit a writing sample as part of the CMT. The state's goal is that all students be able to produce an organized, well-supported piece of writing, which is represented by a holistic score of seven or eight. In 1989, 27 percent of Connecticut students in Grade 8, 17 percent of students in Grade 6, and 18 percent of students in Grade 4 wrote essays that received scores of at least 7. The state's remedial standard for writing is a score of 4, representing the point at which a student has demonstrated minimal proficiency. The percentage of students at or above the remedial standard in Grades 4 and 8 has increased substantially since the writing sample was first administered in 1986. However, the percentage of students at or above the remedial standard in Grade 6 was lower in 1989 than in previous years. Interpretation of the writing results should take into consideration the unique nature of the direct writing assessment. Students' writing performance is assessed exclusively by Connecticut teachers using a somewhat more subjective scoring procedure than is used for the

Connecticut Mastery Test
Statewide Results in Grades 4, 6 and 8

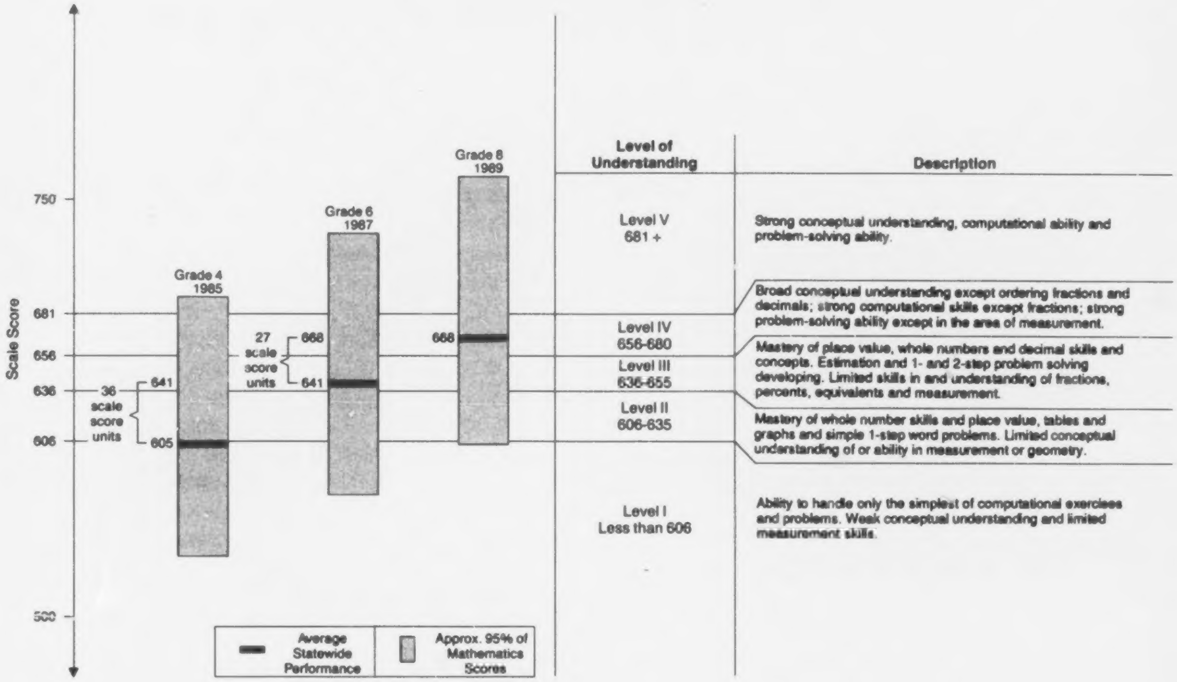
WRITING

	Average Holistic Score			Percent of Students At or Above Remedial Standard		
Year	Grade 4	Grade 6	Grade 8	Grade 4	Grade 6	Grade 8
1989	5.0	4.9	5.5	86	76	92
1988	4.8	4.8	5.1	80	81	85
1987	5.1	4.9	5.2	83	81	88
1986	4.6	4.7	5.0	77	78	83
1985	4.8	—	—	81	—	—
	Prompt Type			Remedial Standard		
	Narrative	Expository	Persuasive	4	4	4

Source: Connecticut State Department of Education

Connecticut Mastery Test
Mathematics Vertical Scale

Comparison of Average Statewide Mathematics Performance
Grade 4 (1985) to Grade 6 (1987) to Grade 8 (1989) Using Scale Scores
Results for 1985 Grade 4 Cohort (Class of 1994)



Level of Understanding	Description
Level V 681 +	Strong conceptual understanding, computational ability and problem-solving ability.
Level IV 656-680	Broad conceptual understanding except ordering fractions and decimals; strong computational skills except fractions; strong problem-solving ability except in the area of measurement.
Level III 636-655	Mastery of place value, whole numbers and decimal skills and concepts. Estimation and 1- and 2-step problem solving developing. Limited skills in and understanding of fractions, percents, equivalents and measurement.
Level II 606-635	Mastery of whole number skills and place value, tables and graphs and simple 1-step word problems. Limited conceptual understanding of or ability in measurement or geometry.
Level I Less than 606	Ability to handle only the simplest of computational exercises and problems. Weak conceptual understanding and limited measurement skills.

Source: Connecticut State Department of Education

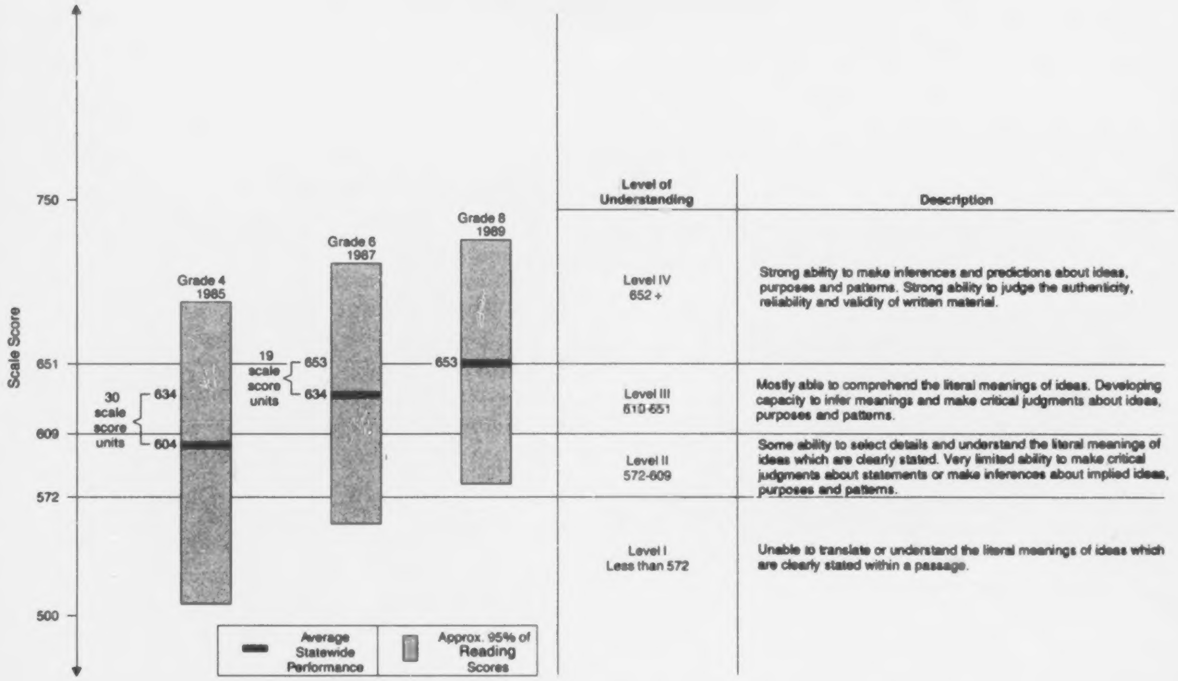
other parts of the CMT, which accounts for some minor fluctuation annually in the statewide results.

Student growth on the CMT over time. Since students who took the fourth grade test in 1985 subsequently took the sixth grade test in 1987 and the eighth grade test in 1989, change in performance on the CMT can be assessed across four years' time for this group. However, growth across time cannot be measured simply by comparing average raw scores on the three tests since the Grade 4, 6, and 8 tests differ with respect to content, difficulty and length. Instead, one scale score system, known as a vertical scale, must be employed. A vertical scale was established for the mathematics test and the reading comprehension section of the language arts test. For each grade and content area, any individual's raw score corresponds to a specific value on the vertical scale; in this way performance can be compared across grade levels.

Results of this longitudinal study indicate that there was meaningful growth in both mathematics and reading comprehension from Grade 4 to Grade 6 and from Grade 6 to Grade 8. The mathematics vertical scale shows that average performance moved substantially in a positive direction, from Level I of Understanding in 1985 when students were in Grade 4, to Level III of Understanding in 1987 when students were in Grade 6, to Level IV of Understanding when students reached Grade 8. This means that the typical Connecticut student progressed from an ability to handle only the simplest of computational problems in Grade 4, to mastery of place value, whole numbers and decimals in Grade 6, and then on to broad conceptual understandings and strong computational skills (excluding fractions), and strong problem-solving ability (excluding measurement problems) in Grade 8. The vertical scale for reading comprehension indicates that in Grade 4 the typical student displayed the ability to literally comprehend written prose (Level II). By Grade 8, the typical student had progressed to being able to make inferences and predictions about the ideas, purposes and patterns in a piece of writing, and could judge the authenticity, reliability and validity of written material (Level IV of Understanding). While initial results are encouraging, it is premature to draw definitive conclusions about how much growth to expect as students progress from grade to grade. Such conclusions are possible only after the program has been in effect for several more years.

Connecticut Mastery Test
Reading Comprehension Vertical Scale

Comparison of Average Statewide Reading Performance
Grade 4 (1985) to Grade 6 (1987) to Grade 8 (1989) Using Scale Scores
Results for 1985 Grade 4 Cohort (Class of 1994)



Level of Understanding	Description
Level IV 652 +	Strong ability to make inferences and predictions about ideas, purposes and patterns. Strong ability to judge the authenticity, reliability and validity of written material.
Level III 610-651	Mostly able to comprehend the literal meanings of ideas. Developing capacity to infer meanings and make critical judgments about ideas, purposes and patterns.
Level II 572-609	Some ability to select details and understand the literal meanings of ideas which are clearly stated. Very limited ability to make critical judgments about statements or make inferences about implied ideas, purposes and patterns.
Level I Less than 572	Unable to translate or understand the literal meanings of ideas which are clearly stated within a passage.

Source: Connecticut State Department of Education

Performance on the CMT from a national perspective. Normative information indicates how well the average student in Connecticut performs compared to a national sample of students. Norms are available for the mathematics, language arts and reading comprehension tests of the CMT. These norms are based on links established between the CMT and the sixth edition of the Metropolitan Achievement Test (MAT-6). The norms are expressed in percentile ranks which provide estimates of group performance relative to the performance of the national MAT-6 norm group. Percentile ranks range from 1 to 99. A percentile rank of 50 represents the national average and divides the norm group into two equal parts, half scoring below and half scoring above this value.

In each content area and administration year, the mean national percentile rankings of Connecticut students has substantially exceeded the national average (50th percentile rank). In 1989 Connecticut students scored at or above the 65th percentile in mathematics and language arts at all three grade levels, and above the 55th percentile in reading comprehension. The percentile ranks within each content area have been stable across the three years.

Students at risk. A longitudinal study was conducted in 1990 that examined the achievement of Connecticut students who were judged to be at risk academically. The study followed approximately 17,000 students who were in Grade 4 during 1986, tracking them over a two-year period until they were in Grade 6 during 1988. Additionally, a similar-size cohort of students in Grade 6 during 1986 was tracked until Grade 8 in 1988. CMT results for these students indicate mixed patterns of achievement (see the table on page 22):

- the academic deficiencies of the majority of students at risk were eliminated or reduced over the two-year period;
- approximately one of every eight at-risk students experienced increased academic deficiencies in spite of being identified as candidates for remediation; and
- students at risk who were also in large urban districts, minority ethnic groups, Priority School Districts and/or impoverished circumstances were initially at a substantial academic deficit and demonstrated a mixed achievement pattern over the two-year period.

Performance of At-Risk Students
1986-1988

Cohort 1 — Grade 4 (1986) to Grade 6 (1988)

	Total Tested	At Risk in 1986	Performance in 1988 of At-Risk Students		
			Improved	Same	Decreased
State	17,068	5,598	53%	32%	15%
Sex					
Male	8,005	3,007	54%	32%	15%
Female	9,063	2,591	55%	32%	14%
Economic Status					
Participants in Free/Reduced-Price Lunch Program	2,457	1,555	45%	37%	18%
Nonparticipants	14,609	4,043	56%	30%	13%
Race					
White	13,263	3,544	56%	31%	13%
Black	1,522	964	46%	35%	19%
Hispanic	1,014	708	48%	37%	16%

Cohort 2 — Grade 6 (1986) to Grade 8 (1988)

	Total Tested	At Risk in 1986	Performance in 1988 of At-Risk Students		
			Improved	Same	Decreased
State	17,275	6,411	64%	28%	9%
Sex					
Male	8,094	3,268	64%	28%	9%
Female	9,180	3,143	64%	28%	9%
Economic Status					
Participants in Free/Reduced-Price Lunch Program	1,961	1,310	52%	36%	12%
Nonparticipants	15,311	5,098	66%	26%	8%
Race					
White	13,813	4,370	68%	25%	7%
Black	1,518	1,029	53%	35%	12%
Hispanic	935	659	50%	36%	15%

Note: Percentages may not equal 100 due to rounding.

Source: Connecticut State Department of Education

Connecticut Assessment of Educational Progress

From 1971 through 1987 the Connecticut Assessment of Educational Progress (CAEP) identified strengths and weaknesses in a variety of curriculum areas. The curriculum areas assessed included art and music, business and office education, career education, citizenship/social studies, drafting, graphic arts, small engines, foreign language, mathematics, English/language arts and science.

As the project evolved, CAEP assessments placed strong emphasis on performance — that is, requiring students to demonstrate "knowledge-in-use" rather than to simply select multiple choice options. The assessments also emphasized higher-order thinking skills. One common finding of both the mastery test program and CAEP assessments is the general weakness of students on items that require higher-order thinking. The following is a synthesis of findings on student weaknesses in higher-order thinking skills from the CAEP program.

- Social Studies (1983). Students had difficulty recognizing associations such as cause and effect, drawing conclusions from evidence and interpreting data displays, and solving problems.
- English/Language Arts (1984). Students had difficulty with analysis and evaluation in the context of writing, reading and listening, and supporting and elaborating on points of view or positions.
- Science (1985). Students had difficulty understanding science processes (for example, distinguishing between observations and inferences), and designing multivariable experiments and drawing conclusions.
- Foreign Language (1987). Students performed more poorly in the productive domains of speaking and writing than in the receptive domains of reading and listening.

Since most CAEP tests included some items from the National Assessment of Educational Progress (NAEP), it was possible to compare the performance of Connecticut's students with their peers around the country. In the 14 assessments conducted between 1971 and 1985, Connecticut's 4th, 8th and 11th grade students outperformed students nationwide in 33 of 41 comparisons.

Future Connecticut Assessments

There are three major new student assessment efforts underway which are already having an impact on education throughout the state. The first is the NAEP Trial State Assessment Program. Connecticut eighth grade students were assessed in mathematics in 1990. The results for Connecticut, 39 other states and territories, and the nation as a whole will be released in mid-1991. Future plans include a reading and mathematics assessment in 1992 which will involve Grade 4 and Grade 8 students.

The CMT is being expanded to the high school level. This assessment will occur in Grade 10 or 11 and will be expanded in content beyond mathematics, reading and writing. Probable content areas include science and social studies. Planning and development of the assessment are currently underway. It is expected that this program will include both traditional and performance assessment components. The high school CMT is scheduled for implementation in 1993 with pilot activities in 1991 and 1992.

The Common Core of Learning (CCL) assessment is planned to be fully operational in 1992 with a pilot test in 1991. The CCL Assessment Project is being conducted in collaboration with the National Science Foundation. This program employs performance assessment techniques, using strategies such as cooperative learning, extended tasks, open-ended problem solving and group assignments to assess a variety of academic skills and competencies at the high school level. Initially, the content areas under consideration are high school science and mathematics. Future plans are to expand the program into additional content areas, such as the performing and creative arts and the humanities.

National Testing of College-Bound Students

Each year the College Board provides the Connecticut results for its national testing programs for college-bound students, which include the following: (1) the Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test

Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT) Average Scores for College-Bound Juniors

Test Year	Expected Year of Graduation	Verbal		Mathematics	
		CT	Nation	CT	Nation
1989	1991	41.3	40.2	44.2	44.4
1988	1990	41.7	40.7	45.2	45.6
1987	1989	42.1	40.4	45.1	45.0
1986	1988	42.2	40.9	45.3	45.0
1985	1987	42.5	40.9	45.5	45.0
1984	1986	42.4	41.0	44.6	44.2
1983	1985	42.4	40.9	45.3	44.7
1982	1984	42.3	41.1	45.0	44.7
1981	1983	42.8	41.5	45.6	45.1
1980	1982	41.9	40.6	45.2	45.2
1979	1981	41.6	40.3	45.3	45.3
1978	1980	42.2	40.6	45.3	44.8

Source: The College Board

(PSAT/NMSQT); (2) the Scholastic Aptitude Test (SAT); (3) the Achievement Tests (ACH); and (4) the Advanced Placement Tests (AP). This information makes it possible to monitor the performance of public and nonpublic school students who are planning to attend college.

Preliminary Scholastic Aptitude Test and National Merit Scholarship Program. Many students who plan to attend college elect to take the PSAT in the fall of their junior year in high school. In addition to being a helpful trial run for the SAT, the PSAT is used by the National Merit Scholarship Corporation as the basis for determining scholarship semifinalists and letter of commendation recipients.

The PSAT, a somewhat shorter and easier version of the SAT, consists of verbal and mathematics sections scored on a scale of 20 to 80. In 1989, Connecticut's average verbal and mathematics PSAT scores were slightly lower than those reported for the state over the last decade. However, the average verbal score for Connecticut students was still above the national average. In mathematics, the average score of Connecticut students was about equal to the national average but somewhat lower than the state's average scores for the previous 11 years.

National Merit Scholarship Program

Test Year	Merit Program Year	Number of Schools	Connecticut Commended Scholars	Percent Commended CT	Percent Commended Nation
1989	1991	154	825	3.8	3.3
1988	1990	160	860	4.0	3.2
1987	1989	160	1,010	4.2	3.1
1986	1988	157	957	3.7	3.1
1985	1987	169	1,073	4.3	3.2
1984	1986	163	965	4.0	3.2
1983	1985	157	1,004	4.5	3.3
1982	1984	166	1,074	4.3	3.2
1981	1983	173	1,190	4.5	3.2
1980	1982	170	1,151	4.2	3.2
1979	1981	171	1,086	4.0	3.0

Source: National Merit Scholarship Corporation

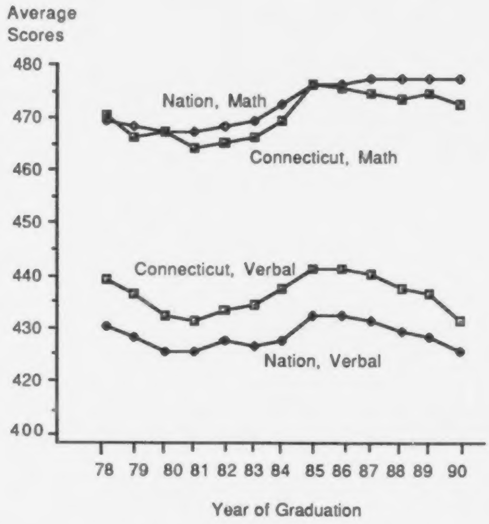
All students who take the PSAT are automatically considered for a scholarship award or recognition through the National Merit Scholarship Program. Awards are given two years later when the students enter college. The highest scoring students in each state are designated semifinalists; they represent about half of one percent of the state's secondary school seniors. In 1989, 212 Connecticut students from 80 public and nonpublic schools were semifinalists. For the past five years, the score that qualified students in Connecticut as semifinalists has consistently been among the highest in the country.

Students with PSAT scores that are high but below those of the semifinalists receive letters of commendation. Letters of commendation are given out without regard for any state-by-state distribution; commended students are simply those who fall above the 95th percentile of college-bound juniors nationwide who take the test. As a result, some states have proportionally more commended students than do others, relative to their senior class populations. Of the students who took the PSAT in 1989, 825 students from 154 Connecticut schools were designated to receive letters of commendation. The percentage of students who will receive letters of commendation in Connecticut (3.8%) is slightly higher than the percentage of students who will receive letters of commendation nationwide (3.3%).

Scholastic Aptitude Test. The SAT is a measure of basic verbal and mathematical reasoning abilities. Many college admissions officers use SAT results to supplement a student's high school record because the SAT has been shown to be a valid predictor of success in college.

The percentage of students taking the SAT in Connecticut is consistently and substantially higher than the percentage nationwide. In 1989-90, 74 percent of Connecticut graduates took the SAT, compared to 40 percent nationwide. In general, according to the College Board, the higher the participation rate, the lower the average state scores will be. However, this is not entirely true of Connecticut. Though Connecticut students' SAT scores dropped slightly in 1989-90 (the average verbal score was 430, down five points from 1988-89's average and equal to the 1980-81 low), Connecticut's average was still

Average Scholastic Aptitude Test (SAT) Scores for College-Bound Seniors



Source: The College Board

six points above the current national average. The Connecticut 1989-90 average SAT mathematical score of 471 is two points below the 1988-89 state average and five points below the 1989-90 national average. Over the past 10 years, Connecticut has generally fallen slightly below the national mathematics average.

There continues to be a gap between the SAT scores of males and females. In Connecticut in 1989-90, the average verbal score was 433 for males compared to 427 for females, a 6-point difference. The gap in verbal scores has been as small as 3 points (1978-79) and as large as 17 points (1988-89). The 1989-90 average verbal score for Connecticut males was the lowest it has been in the past decade. In 1989-90, the average SAT mathematical score of Connecticut males was 490 and that of females was 452. This difference of 38 points is the smallest gap in mathematical scores recorded in the state in the past decade, during which time the gap has been as wide as 50 points (1981-82).

SAT Scores by Gender

	Verbal		Mathematical	
Year	Male	Female	Male	Female
1989-90	433	427	490	452
1988-89	444	427	496	451
1987-88	443	431	492	454
1986-87	442	435	496	452
1985-86	444	437	499	451
1984-85	444	436	499	454
1983-84	443	430	490	447
1982-83	437	429	489	443
1981-82	437	428	490	440
1980-81	436	424	488	439
1979-80	434	428	487	446
1978-79	437	434	488	443
1977-78	441	435	493	447

Source: The College Board

Combined SAT Scores By Race

Year	Black	Oriental	Hispanic	White	**Total**
1989-90	717	924	755	925	901
1988-89	719	916	764	931	908
1987-88	725	933	763	927	908
1986-87	725	930	744	928	912
1985-86	718	922	745	928	914
1984-85	715	928	750	934	915
1983-84	708	957	729	923	904
1982-83	698	936	721	918	897
1981-82	701	933	716	916	895
1980-81	680	942	717	910	892
1979-80	691	930	721	915	896
1978-79	684	944	706	916	900
1977-78	688	959	728	924	907

Source: The College Board

The participation of minority students on the SAT is slowly but steadily increasing. In 1990, 14 percent of students taking the SAT in Connecticut identified themselves as belonging to an ethnic minority, compared to 13.2 percent in 1988 and 11.7 percent in 1987. In addition to an increase in minority participation, the gaps in combined SAT scores between white students and minority students are narrowing. In recent years, the difference between white students' and black students' SAT scores (math and verbal scores combined) has been as high as 236 points (1977-78). The difference between the SAT scores of Hispanic students and white students has been as high as 210 points (1978-79). In 1987-88, the differences in scores between white and black students, and white and Hispanic students, were the smallest ever (202 points and 164 points, respectively), but the gap has widened slightly in the last two years (to 208 and 170 points, respectively).

The combined math and verbal SAT scores of both black and Hispanic students declined in 1990 from their peaks in 1987 and 1989, respectively. However, SAT scores of black and Hispanic students are still substantially higher than a decade ago.

Test of Standard Written English. Since 1974-75, the SAT has included the Test of Standard Written English (TSWE), which evaluates, on a scale of 20 to 80, students'

Test of Standard Written English
Average Scores of College-Bound Seniors

	Males		Females		Total	
Year	CT	Nation	CT	Nation	CT	Nation
1989-90	42.0	41.8	43.8	43.2	42.9	42.5
1988-89	42.7	41.9	44.2	43.3	43.5	42.6
1987-88	42.7	42.3	44.2	43.7	43.5	43.0
1986-87	42.7	42.3	44.4	43.7	43.6	43.0
1985-86	42.1	41.9	43.6	43.2	42.8	42.6
1984-85	42.6	42.0	44.1	43.1	43.4	42.7
1983-84	42.5	41.9	44.1	43.3	43.3	42.6
1982-83	42.1	41.6	43.7	43.0	43.0	42.3
1981-82	41.8	41.7	43.1	42.8	42.5	42.3
1980-81	41.9	41.5	43.3	42.9	42.6	42.2
1979-80	42.3	41.7	43.7	43.0	43.0	42.4
1978-79	42.3	41.8	44.2	43.2	43.3	42.5
1977-78	42.8	42.0	44.6	43.5	43.7	42.8

Source: The College Board

ability to recognize standard written English. It was developed to help colleges place students in freshman English courses. On this test, the average Connecticut score dropped somewhat in 1989-90, though it was still slightly higher than the national average. Female students consistently outperform males on this test, both within Connecticut and nationwide. Scores in Connecticut on this test over the past decade have remained relatively stable.

Achievement Tests and Advanced Placement Tests. Unlike the verbal and mathematical sections of the SAT, which are intended to measure general aptitude, the College Board's Achievement Tests and Advanced Placement tests aim to measure a student's school learning of specific subject-area content. The College Board notes that high scores on these tests "depend to a considerable extent on the opportunities offered in secondary school for learning the particular concepts and skills measured by the tests."

In 1989-90, 24 percent of Connecticut high school graduates took at least one of the College Board's Achievement Tests, three times the national average of 8 percent. The five most frequently taken Achievement Tests in 1989-90 in Connecticut were English Composition, Mathematics Level I, Mathematics Level II, American History and Biology. Connecticut's average scores on the two most frequently taken tests (English Composition and Math Level I) were at 10-year highs. Ten-year highs were also recorded in biology, chemistry, literature, physics and Spanish.

The College Board's Advanced Placement (AP) examinations give any high school student (not only those enrolled in advanced placement courses) an opportunity to demonstrate college-level achievement for which they may receive college credit or be exempted from required courses. In May 1990, 5,736 students from 179 public and nonpublic schools took a total of 8,716 Advanced Placement tests. That year 13.6 percent of the test-takers identified themselves as minorities, compared to 12.1 percent the year before. The test-takers were evenly split between males and females. The percentage of AP test-takers from the public schools has increased to 55.1 percent in 1990, up from 50.6 percent in 1984.

Advanced Placement examinations are scored on a scale from one to five. Most colleges granting credit for AP work require scores of three or higher. In May 1990, 72.6 percent of the examinations taken by Connecticut students were scored three or better, compared to 66.4 percent of those nationally. Of the examinations taken by Connecticut public school students, 72.1 percent were scored three or better, compared to 65.4 percent nationally.

Advanced Placement Test Results

	Percent of tests scored 3 or better*			
	All Students		Public School Students	
Year	CT	Nation	CT	Nation
1989-90	72.6	66.4	72.1	65.4
1988-89	71.2	65.3	69.6	65.0
1987-88	73.5	67.2	71.6	66.0
1986-87	73.7	67.6	74.2	66.4
1985-86	76.1	68.6	75.7	67.0
1984-85	74.8	67.1	75.4	65.7
1983-84	76.5	69.5	75.7	68.6
1982-83	76	70	na	na
1981-82	75	70	na	na
1980-81	76	71	na	na
1979-80	77	70	na	na
1978-79	77	71	na	na

* Test score scale is from 1 to 5.

Source: The College Board

Advanced Placement Test Participants

	Schools		Students		Minorities		Public School Participation Rates	
Year	Total	Public	Total	Public	Total	Public	Seniors	Juniors
1989-90	179	121	5,736	3,158	778	363	6.7%	3.2%
1988-89	178	122	5,796	3,206	699	282	6.2%	2.9%
1987-88	172	118	5,666	3,163	554	266	6.0%	2.6%
1986-87	164	108	5,420	2,809	385	176	4.9%	2.3%
1985-86	163	105	4,851	2,529	369	159	5.0%	2.2%
1984-85	155	99	4,533	2,315	332	131	4.5%	1.9%
1983-84	155	99	4,220	2,134	305	113	4.3%	1.8%
1982-83	154	98	3,790	1,929	265	na	na	na
1981-82	143	na	3,604	na	na	na	na	na
1980-81	143	na	3,570	na	na	na	na	na
1979-80	139	na	3,111	na	na	na	na	na
1978-79	133	na	2,749	na	na	na	na	na

Source: The College Board

High School Graduates

The total number of high school diplomas awarded annually in Connecticut has followed a fairly consistent decline after peaking at 52,586 in 1978, primarily due to declining enrollments in the public schools. Much of the decline occurred between 1983 and 1986, when the total number of graduates dropped from 50,152 to 43,484. Trends in the number of diplomas awarded vary by type of institution. The number of graduates from the local public schools peaked at 40,612 in 1976, was 29,320 in 1989, and is expected to decline through 1994. The number of nonpublic school graduates peaked in 1983, while the number of vocational-technical school graduates peaked in 1985.

High School Diplomas

Year of Graduation	Local Public	Vocational-Technical	Non-public	GED	Total
1989	29,320	2,192	5,641	3,636	40,789
1988	30,906	2,135	5,981	4,213	43,235
1987	31,129	2,282	6,005	4,523	43,939
1986	30,479	2,479	5,836	4,690	43,484
1985	31,880	2,634	5,914	4,068	44,496
1984	33,686	2,626	6,048	4,488	46,848
1983	36,204	2,503	6,229	5,216	50,152
1982	37,706	2,518	6,029	4,625	50,878
1981	38,577	2,410	6,021	3,984	50,992
1980	37,683	2,355	6,027	4,883	50,948
1979	39,727	2,206	6,186	4,310	52,429
1978	39,914	2,267	6,088	4,317	52,586
1977	40,393	2,233	6,049	3,877	52,552
1976	40,612	2,040	5,961	3,945	52,558
1975	40,479	1,838	5,915	3,662	51,894

Source: Connecticut State Department of Education

Graduation Rate. The high school graduation rate is an estimate of the percentage of ninth graders enrolled in public schools who are graduated four years later. The rate is calculated by dividing the number of graduates by the number of ninth grade students four years earlier. This statistic, when aggregated statewide, provides a good indication of the overall number of students who successfully complete high school in Connecticut. However, it should be noted that the graduation rate does not simply reflect the high school dropout rate, since the graduation rate also is influenced by factors such as student migration, accelerated completion, and mortality.

In 1989, 29,320 of the 37,215 students who entered high school four years earlier graduated from Connecticut public high schools, resulting in a graduation rate of 78.8 percent. Since the late 1970s, the graduation rate has varied only moderately from a high of 78.9 percent in 1977 to a low of 74.7 percent in 1980.

Graduation Rate of Public School Students in Connecticut

Year of Graduation	Number of Graduates	Number of 9th Graders 4 Years Earlier	Percent Completing
1989	29,320	37,215	78.8
1988	30,906	39,530	78.2
1987	31,129	39,952	77.9
1986	30,479	39,484	77.2
1985	31,880	40,934	77.9
1984	33,686	43,322	77.8
1983	36,204	46,455	77.9
1982	37,706	49,706	75.9
1981	38,235	50,688	75.4
1980	37,683	50,447	74.7
1979	39,727	52,241	76.0
1978	39,914	51,510	77.5
1977	40,393	51,179	78.9

Source: Connecticut State Department of Education

When graduation rates are calculated for subgroups within the graduating class, there are clear differences in the graduation rate by race, with the rate for black and Hispanic students significantly lower than that for white students. For example, in 1989 the graduation rate was 83.5 percent for white students, compared to 62.5 percent for black students and only 48.8 percent for Hispanic students. In fact, except for a slight decrease in 1986, the graduation rate for white students has steadily increased, whereas the rates for black and Hispanic students have fluctuated.

Graduation Rates of Public School Minority Students in Connecticut

Year of Graduation	---------------Percent Graduating-----------			
	Overall	White	Black	Hispanic
1989	78.8	83.5	62.5	48.8
1988	78.2	82.6	61.8	49.6
1987	77.9	82.5	61.1	48.2
1986	77.2	81.1	64.3	49.2
1985	77.9	82.5	61.7	46.2
1984	77.8	82.4	61.0	45.9
1983	77.9	81.2	62.9	50.8

Source: Connecticut State Department of Education

High School Equivalency Examinations, 1977-90

Year	Number of Tests Administered	Number of Tests Passed	Percent Passing
1990	6,947	4,811	69.3
1989	5,884	3,636	61.8
1988	6,161	4,213	68.4
1987	6,711	4,523	67.4
1986	6,882	4,690	68.1
1985	6,482	4,068	62.8
1984	7,235	4,488	62.0
1983	7,636	5,216	68.3
1982	7,987	4,625	57.9
1981	6,588	3,984	60.5
1980	6,804	4,883	71.8
1979	7,230	4,310	59.6
1978	7,297	4,317	59.2
1977	7,772	3,877	49.9

Source: Connecticut State Department of Education

High School Equivalency Examinations. In 1990, 4,811 adults qualified for a high school equivalency diploma by passing either all parts of the General Educational Development (GED) test or by passing the part previously failed. This represents 69.3 percent of all individuals who took the test in 1990. In recent years the percentage passing has varied from 49.9 (1977) to 71.8 (1980). In 1990, 3,762 of the individuals who took the test were prepared in adult education classes, and 2,448 (65.1 percent) of those individuals passed the test.

Postsecondary education. An important indicator of educational outcome is the activities students pursue after they graduate from high school. Traditionally, a high percentage of Connecticut's high school graduates continue their formal education. The 72.7 percent of the 1989 graduates from Connecticut's public high schools continuing their education was the highest ever.

The majority of high school graduates going on to higher education attend four-year colleges or universities (51.5 percent of all 1989 graduates), whereas a smaller percentage (15.5 percent of all 1989 graduates) go to two-year colleges. The percentages of students who continued on to four-year colleges and two-year colleges were the highest ever in 1989.

There are notable disparities in the numbers of minority and nonminority students who pursue further education after

Public High School Graduates Continuing Their Education

Year of Graduation	Total[1] Graduates	Total[2] Education		4-Year College		2-Year College		Vocational Program		Other Education	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1989	29,320	21,325	72.7	15,108	51.5	4,559	15.5	1,302	4.4	356	1.2
1987	31,129	21,798	70.0	15,776	50.7	4,127	13.2	1,487	4.8	408	1.3
1985	31,880	21,252	66.7	14,598	45.8	4,317	13.5	1,854	5.8	483	1.5
1983	36,204	23,581	65.1	15,614	43.1	4,975	13.7	2,419	6.7	573	1.6
1981	38,577	24,199	62.7	16,338	42.4	4,706	12.2	2,565	6.6	590	1.5
1979	39,727	24,328	61.2	16,381	41.2	4,899	12.3	2,506	6.3	542	1.4
1977	40,393	24,240	60.0	15,892	39.3	5,245	12.9	2,803	6.9	300	0.7

[1] Includes graduates from Norwich Free Academy, Gilbert School and Woodstock Academy; excludes vocational-technical school graduates.

[2] The activity of approximately five percent of the students is unknown.

Note: Percentages are percent of total graduates.

Source: Connecticut State Department of Education

high school. In addition to having much lower graduation rates than their white counterparts, minority graduates are less likely to continue their formal education. The percentage of minority graduates (blacks, Hispanics, Asian-Americans and American Indians) pursuing educational activities after high school increased by 2.6 percent from 1988 to 1989's all-time high of 66.2 percent, but still lags behind the percentage for whites (73.9). For example, in 1989, 38.6 percent of minority students went on to four-year colleges, compared to 53.9 percent of white students. Minority graduates are more likely than white graduates to attend two-year colleges (20.1 percent versus 14.7 percent in 1989).

Career-related activities. In 1989, 23.4 percent of public high school graduates sought to enter the work force immediately following graduation. Of those students, 81.1 percent found employment, 13.2 percent entered the military, and 5.7 percent were reported as unemployed. The number of high school graduates entering the job market has continued its decline, dropping from 13,677 in 1976 to 6,857 in 1989.

Public High School Graduates in Career-Related Activities

Year of Graduation	Total [1] Graduates	Seeking Careers [2]		Military		Employed		Unemployed	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1989	29,320	6,857	23.4	905	13.2	5,560	81.1	392	5.7
1987	31,129	8,012	25.7	1,066	13.3	6,584	82.2	362	4.5
1985	31,880	9,186	28.8	1,310	14.3	7,208	78.5	668	7.3
1983	36,204	10,785	29.8	1,548	14.4	7,979	74.9	1,258	11.7
1981	38,577	11,751	30.5	1,446	12.3	9,008	76.7	1,297	11.0
1979	39,727	13,040	32.8	1,406	10.8	10,383	79.6	1,251	9.6
1977	40,393	13,166	32.6	1,610	12.2	9,808	74.5	1,748	13.3
1975	40,479	13,241	32.7	1,463	11.0	9,820	74.2	1,958	14.8

[1] Includes graduates from Norwich Free Academy, Gilbert School and Woodstock Academy; excludes vocational-technical school graduates.

[2] The activity of approximately five percent of the students is unknown.

Note: Percentages are percent of those seeking careers.

Source: Connecticut State Department of Education

4

Programs

To understand the full range of what is meant by educational programs, it is essential to examine the answers to three central questions:

- What is being taught?
- Who is teaching it?
- What resources are available to both the teacher and the student to help make the learning experience as successful as possible?

The teacher is the center of the educational universe. It is therefore critical that we ensure that only the best educators are teaching Connecticut's youth. To do this, Connecticut has directed significant resources to enhance teacher salaries, redesign the certification system, provide testing of and support for student and beginning teachers, and require continuing professional development of experienced teachers. This chapter on programs begins, therefore, with a detailed discussion of Connecticut's commitment to the teaching profession.

Also included here are discussions of the following, which address the questions about curriculum and resources noted above:

- Instructional programs, including early childhood initiatives, graduation requirements and the Common Core of Learning, vocational education and adult education;
- Support programs, including equity initiatives, special education, child nutrition, bilingual education, compensatory and migrant education; and
- Rehabilitation services for both youth and adults who require unique programs of training and support in order to learn or relearn skills essential to independence in work, family and community life.

The Connecticut Continuum: Connecticut's Commitment to the Teaching Profession

Connecticut has been addressing the pivotal role of teachers in education for more than a decade. Concerned about the ability of public schools to attract and retain quality teachers, Connecticut began to address improvements in teaching in 1980. In 1986, after years of conceptualizing and developing programs, the Education Enhancement Act was passed. Programs related to ensuring professional competence within four phases of a teacher's career — the decision to become a teacher, preparation, induction and continuing professional growth — were specified in the legislation.

Decision Initiatives

Salary Enhancement — The salary sections of the Education Enhancement Act provided state funds to increase Connecticut teacher salaries to among the highest in the nation. In 1989-90, the average salary of all Connecticut teachers was $41,361 — 40.5 percent more than before the act's implementation. The median starting salary increased 40.2 percent in the same period to $23,859.

Certification — A new certification system was implemented July 1, 1989, to acknowledge the professional development stages of a teacher's career. The old two-tier system of a provisional and standard teaching certificate has been replaced by a three-tier system with initial, provisional and professional educator certificates. As part of the July 1, 1989, implementation, 37,000 standard or permanent certificates were converted to five-year professional educator certificates. Teachers who hold such certificates are required to earn nine continuing education units (CEUs) every five years to maintain their professional educator certification; this represents 90 hours of professional development activities for every veteran teacher. In addition to the significant effort represented by the conversion of certificates awarded under the old system, the Department issued 14,734 initial, provisional and professional educator certificates between January 1, 1989, and June 30, 1990.

The total number of certificates issued each year by the State of Connecticut Department of Education is showing a steady increase. In recognition of the expanding workload and paper flow in the Bureau of Certification and Accreditation, Imaging (an electronic scanning and retrieval system) will be available in 1991 to provide instant access to information. Another use of advanced technology in this bureau is the installation of a customized voice messaging system which allows individuals to have access to up-to-the-minute information regarding their certification status 24 hours a day, seven days a week. By the use of voice messaging, service to clients has improved significantly.

The Bureau of Certification and Accreditation is active in recommending legislative changes for continuous improvement in administrative and professional aspects of certification.

Alternate Route to Certification — Highly qualified individuals can become certified to teach after completing an intensive, special program and two years of closely supervised full-time teaching in a Connecticut public school. To be considered for admission to the alternate route program, individuals must present a strong subject matter background and the requisite liberal arts courses in addition to other evidence of potential for a successful teaching career. This program is in its third year of operation and has graduated two classes totaling 207 individuals, 50 percent of whom are now teaching in Connecticut schools.

Preparation Initiatives

CONNCEPT — The Connecticut Competency Examination for Prospective Teachers (CONNCEPT) ensures that prospective teachers have essential skills in reading, writing and mathematics. Satisfactory completion of CONNCEPT is required for normal admittance to a Connecticut teacher preparation program. CONNCEPT is also a prerequisite for certification, regardless of where one has trained to be a teacher or prior teaching experience.

Teacher Preparation Programs — The state has revised and strengthened criteria for approving teacher education and preparation programs. This work was done in cooperation with the Board of Governors for Higher Education and Connecticut's colleges and universities.

Connecticut's Teaching Competencies — These establish a standard of competency and a common language of teaching for public school teachers. The competencies include 15 skills a teacher must develop in order to earn a provisional educator certificate.

Academic Major — Connecticut has revised its requirements for prospective teachers. Graduates need to major in the specific subject area they plan to teach or, for elementary teachers, in a specially designed interdisciplinary major, rather than in education.

CONNTENT — This examination, which ensures that prospective teachers have the content knowledge critical to their subject specialization, is a requirement for initial certification. The state has phased in CONNTENT exams in 22 subject areas.

CONNECT — This is a customized test to assess the competency of prospective elementary education teachers.

Cooperating Teacher Program — This program allows specially trained, experienced teachers to assist student teachers in their first classroom experiences. Developing teachers receive support and feedback, while the veteran teachers undergo personal development by sharing knowledge and skills. There is a close relationship between the Cooperating Teacher Program and the Beginning Educator Support and Training (BEST) Program as described below. Between 1986 and 1990, more than 5,000 teachers were trained to serve in the roles of cooperating and/or mentor teachers.

Initial Educator Certificate — This is granted to qualified individuals who have met the CONNCEPT and CONNTENT requirements. It is valid for one year, and may be renewed once under certain circumstances, as beginning teachers participate in a formal induction program.

Induction Initiatives

BEST — The Beginning Educator Support and Training (BEST) Program provides a combination of support and assessment for the beginning teacher. In this program, mentors serve as role models and guide beginning teachers as they develop the skills outlined in the Connecticut Teaching Competencies. Currently there are more than 5,000 educators in the cooperating and/or mentor teacher pool. In addition, trained assessors (including teachers, administrators and other educators) conduct classroom observation assessments to verify that new teachers have achieved a level of competency warranting provisional certification. This program was piloted in approximately 60 districts in 1988-89. On July 1, 1989, the BEST program was implemented statewide to include all local school districts, vocational-technical schools and approved private special education facilities. During 1989-90, more than 400 beginning teachers participated as part of the requirements to receive their provisional educator certificates.

Provisional Educator Certificate — This is granted to individuals who have successfully completed BEST. It is valid for eight years.

Career Initiatives

Professional Educator Certificate — This certificate is granted to teachers who have earned a provisional educator certificate and subsequently have completed at least three years of successful teaching and 30 hours of college-level study in accordance with regulations relative to the certificate. In order to maintain their professional educator certificates, teachers must complete nine continuing education units (CEUs) every five years (a total of 90 hours of professional development).

The Institute for Teaching and Learning — Ongoing and systematic professional development is a major commitment of the State Board of Education. The centerpiece of this effort is the State Department of Education's Institute for Teaching and Learning (ITL), which began in the summer of 1984 with a budget of $500,000. Twenty-four courses in a variety of instructional areas were offered to 600 teachers that year.

The Institute progressively increased its course offerings and professional development initiatives as funding for the program grew. During the 1985-86 school year, conferences and workshops were added to the summer programs, attracting 2,000 participants during the first year. By 1987-88, the Institute was funded at $2.8 million and offered more than 150 summer institutes to approximately 3,000 teachers. At the same time, the Institute expanded to include Program Improvement Institutes, residential programs that served teams from school districts which were engaged in curriculum development in reading/language arts and mathematics. By the end of 1987-88, the number of teachers attracted to school-year Institute activities had reached 4,000, with a total participation in Institute programs of more than 7,000 teachers.

During the two years between 1988 and 1990, funding for the Institute for Teaching and Learning diminished and the number of people served in Institute programs was somewhat reduced. The total number of persons served in 1989-90 was 5,370. The objectives of the ITL are to improve teacher performance, expand knowledge, and increase understanding of current issues in education (for example, diversity in the learning environment).

A new and significant program of the Institute, the Connecticut Principals' Academy, was initiated during 1985-86. The Academy provides a convocation, workshops and conferences aimed at improving skills of public school principals. Approximately 1,100 Connecticut administrators participated in these programs during each of the first two years. In 1987-88, the Academy offered a statewide convocation, 7 workshops and 14 conferences attended by approximately 1,500 administrators in the state. By 1989-90, the number served by the Principals' Academy had reached 1,640.

Comprehensive Professional Development Grant — The 1990 General Assembly passed legislation requiring each school district to develop a three-year Comprehensive Professional Development Plan which includes both professional development and teacher evaluation components. The purpose of the plan is to provide the ongoing mechanism for each board to identify systematically and address the professional development and teacher evaluation needs of its professional staff. To assist school districts in the implementation of their three-year plans, the Department makes available annually $1 million for comprehensive professional development implementation grants.

Recognition — Three state programs recognize educational excellence. The Connecticut Teacher of the Year program recognizes and honors teachers who have distinguished themselves in the profession. Teachers selected for these honors are nominated by their peers. In 1989-90, 100 teachers were honored.

The Connecticut Celebration of Excellence program recognizes creative teachers and their innovative curriculum projects. This program is a collaborative effort sponsored by the Department and SNET. Awardees receive from SNET personal cash stipends and funds to share their curriculum projects with others. The teachers who receive these awards are selected from an applicant pool. In 1989-90, more than 100 teachers were recognized through this program.

The Connecticut Educator Award program recognizes and rewards each year eight educators who have distinguished themselves in public education. This program, collaboratively sponsored by the Department and the Milken Family Foundation of California, began in 1988. Those recognized in this program receive a $25,000 gift from the Milken Family Foundation. The teachers and administrators who receive these awards are selected from a pool of persons who have received recognition in one of the Department-sponsored recognition programs.

Early Childhood Initiatives

Traditionally, instructional programs in the public schools have begun in kindergarten and continued through Grade [illegible]2. During the last decade, however, respected researchers have documented that young children involved in high-quality early childhood programs reap many benefits from those programs in later years. Goal V of Connecticut's Comprehensive Plan for 1986-90 was "To Improve and Expand Early Childhood Programs." In the Comprehensive Plan for 1991-1995, *Challenge for Excellence*, this has been reordered and restated as Goal III: "To Ensure Access to Developmentally Appropriate Early Childhood Programs and Services for All Young Children and Their Families."

Many educators are convinced that programs for developmentally delayed infants and toddlers are critical from birth. During the 1989-90 fiscal year, the Department served approximately 550 infants and toddlers through the Birth to Three Programs located at each regional educational service center. The Department also has been active as the lead agency under a federal program that, if implemented, will provide early intervention services to all eligible infants and toddlers throughout the state. This interagency "Birth to Three Initiative" is family focused. The General Assembly has appropriated state funds to begin to establish the Birth to Three system. Legislation was scheduled to be introduced during the 1991 session of the General Assembly that would establish an entitlement system for all developmentally delayed infants and toddlers.

Connecticut continues to serve preschool children with disabilities. On December 1, 1989, more than 4,800 children 3, 4 and 5 years of age were receiving special services through their local school districts, an increase over previous years' enrollments. In recent years, many districts have been actively expanding their program options to include mainstreaming opportunities and more opportunities for families to participate.

In 1985, the General Assembly established a grant program that would provide education programs with day-care components for young parents in a school setting. The Young Parents Program has been an overwhelming success in providing opportunities for young mothers and fathers to continue their educational programs while fulfilling their obligations to their children, including learning parenting skills and providing a quality child-care environment. During the 1989-90 school year, eight programs were funded.

The Department has been a leader in facilitating child-care centers to become accredited by the National Academy of Early Childhood Programs of the National Association for the Education of Young Children, in addition to being licensed by the State Department of Health. As of June 30, 1990, 42 early childhood programs in Connecticut were accredited by the Academy.

Federal Chapter 1 funds were used during the 1989-90 fiscal year by 34 local school districts across the state to serve more than 2,300 children 3 and 4 years old in early childhood programs. These programs provide early education for an educationally at-risk population. Parent involvement is a very important component of these programs.

To promote high-quality, developmentally appropriate kindergartens throughout the state, the State Department of Education published in 1988 its two-volume *Guide to Program Development for Kindergarten*. Subsequently, the Department developed a self-study instrument for teachers of children ages 5 through 8 to support a teacher in implementing an early childhood program reflecting the qualities of developmentally appropriate programming described in the guide. *The Teacher's*

Ongoing Role in Creating A Developmentally Appropriate Early Childhood Program was published in 1990.

The Department supports the concept of extended- or full-day kindergarten programs, particularly for those children who are educationally at risk. The longer day enables the children to have more depth in their school experience. In the school year 1989-90, the Department funded 13 extended-day kindergarten programs. The total number of extended-day or full-day kindergarten programs in local public schools in 1989-90 was 38, including those funded by the State Department of Education.

Connecticut is a leader among states in regard to the provision of before- and after-school care for school-age children. Each year the number of programs available to provide this important service increases. In the 1989-90 school year, 80 of 167 school districts housed programs of before- and after-school care for school-age children in 214 public schools across the state. These programs served approximately 7,500 students.

Department staff members provide program assistance and consultation to licensed day-care centers throughout the state. In March 1990, there were 1,423 licensed day-care centers in the state, with 72,117 children enrolled. These numbers reflect a significant increase over the previous year.

Total prekindergarten enrollment in Connecticut's public schools reached 4,236 in 1989-90. This figure represents prekindergarten children enrolled in public school Head Start, Chapter 1, special education and regular prekindergarten programs. The number of prekindergarten children enrolled in the state's public schools rises each year.

In 1990-91, the Early Childhood Unit within the Bureau of Curriculum and Instruction, Division of Curriculum and Professional Development, plans to shift its emphasis to supporting enhancement of program quality in state-supported programs and Head Start centers, including those in public schools. Training for center directors and educational coordinators will provide the basis for strengthening programs that nurture young children up to school-entry age.

Instructional Programs, K-12

The basic curriculum for kindergarten through Grade 12, prescribed in Connecticut General Statutes Section 10-16b, must include planned, ongoing and systematic instruction in the arts; career education; consumer education; health and safety, including, but not limited to, human growth and development, nutrition, first aid, disease prevention, community and consumer health, physical, mental and emotional health, including youth suicide prevention, substance abuse prevention and safety and accident prevention; language arts, including reading, writing, grammar, speaking and spelling; mathematics; physical education; science; social studies, including but not limited to, citizenship, economics, geography, government and history; and, at the secondary level, one or more foreign languages and vocational education.

To help local school districts meet these instructional responsibilities, the State Department of Education provides assistance in planning, implementing and evaluating their curricula. Primary responsibility for this assistance rests with the Division of Curriculum and Professional Development.

Specialists in each of the subject areas consult with the staffs of individual school districts; hold meetings, conferences and workshops; and furnish materials on curriculum development. The Department has adopted a schedule for the revision of guides for curriculum development that will result in most curriculum guides being updated by 1992. These revised guides will continue to be a major source of information about teaching and learning in subject areas specified in the statutes. Districts use these guides in developing and evaluating programs.

Additionally, statewide curriculum conferences and the establishment of curriculum content criteria for the very successful Institute for Teaching and Learning (ITL) program have supported continued development of professionals in all curriculum areas.

A statewide program having a major effect on the elementary and middle school curriculum in mathematics and language arts, including reading and writing, is the mastery test program in Grades 4, 6 and 8, described in Chapter 3. The Department offers a series of workshops around the state to help teachers and administrators analyze in depth the results of the mastery tests and to provide information related to instruction that will help students achieve the mastery test objectives.

Beginning in 1989, at least one-third of all school districts each year will be reviewed for curriculum compliance in at least one curriculum area. The reviews conducted by June 1990 showed 169 of 179 eligible local education agencies attested to the Commissioner that they had met the requirements of the federal Drug Free Schools Act.

In 1989, Teaching Opportunities for Paraprofessionals (TOP), a program that enables paraprofessionals to become certified classroom teachers through university-based course work, was initiated. In January 1990, the first 25 paraprofessionals in the program were enrolled. The program is supported by state and private funding. Eighty percent of the participants in the program are members of minority groups.

Graduation Requirements and Common Core of Learning

In 1984, the General Assembly amended the statewide standard for a high school diploma to require a minimum of 20 credits, beginning for students graduating in 1988. The legislation also specified the number of credits that must be taken in six subject areas: English — 4; mathematics — 3; social studies — 3; science — 2; art or vocational education — 1; and physical education — 1.

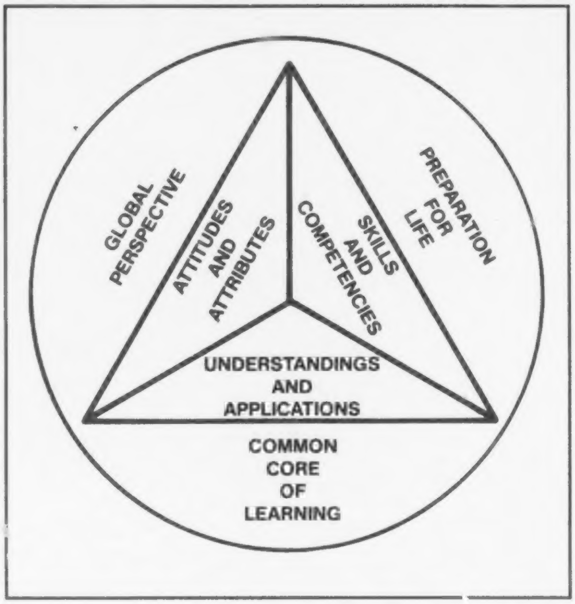
In the fall of 1985, the Advisory Panel on Graduation and Course Requirements, upon reviewing mandated course offerings and the merits of an "exit test" for public high school graduation, recommended against requiring additional credits for high school graduation. The group recommended, instead, that the State Board of Education convene a broadly representative panel to identify a "common core of learning" that Connecticut high school graduates could reasonably be expected to achieve.

Accordingly, in the spring of 1986, the board established an Advisory Committee on the Development of a Common Core of Learning for High School Graduates. Connecticut's Common Core of Learning was drafted by the advisory group and, in January 1987, adopted by the State Board of Education "as the standard of an educated citizen and as its policy on the skills, knowledge and attitudes that are expected of Connecticut's public secondary school graduates." The preamble states:

> *The Common Core establishes a vision of what Connecticut's high school graduates should know and be able to do. It represents a broad array of outcomes that should result from the entire K-12 school experience, including academic skills and knowledge, personal and social skills, attitudes and attributes. We believe the Common Core articulates Connecticut's expectations for its schools and its youth, thereby enhancing the quality and equality of educational opportunities throughout the state.*

The Common Core includes specific student outcomes in three areas:

- **Attributes and Attitudes** — self-concept, motivation and persistence, responsibility and self-reliance, intellectual curiosity, interpersonal relations, sense of community, moral and ethical values;
- **Skills and Competencies** — reading, writing, speaking, listening, viewing, quantitative skills, reasoning and problem solving, and learning skills; and
- **Understanding and Applications** — the arts, careers and vocations, cultures and languages, history and social sciences, literature, mathematics, physical development and health, science and technology.



A tool to assess the implementation of the Common Core is currently being designed. The Common Core of Learning assessment is expected to be piloted for the first time in 1991-92.

Vocational Education

Vocational education affords an important option for Connecticut students. Many students elect to pursue a vocational education program that will lead to immediate employment following high school graduation. Some continue their education and training in postsecondary institutions and others take a limited number of vocational courses to acquire specific skills for personal enrichment.

Jobs for Connecticut's Future reports that by 1995 industries that supply business, professional and financial services will grow at a rate of 45 percent. Strong growth is also expected in the health, education and personal service industries. These high-growth industries will create a strong demand for professional, technical and service workers. In Connecticut, vocational education programs in the local school districts and the state-operated Vocational-Technical School System are designed to educate the employees who will help meet these needs.

Vocational education in the local schools. The vocational education program offered by the state's comprehensive high schools enables students to explore career options; to learn the basics; to acquire employability and applied skills; and, if they so select, to attain specialized skill levels in a chosen occupational area. The vocational student in a comprehensive high school can prepare for entry into high-technology fields, for jobs in the expanding service industries, for advanced training, or for higher education.

Through the administration of federal vocational resources, services are provided to help handicapped and disadvantaged students succeed in their vocational programs. State-managed federal funds are also used to update curricula and to provide professional development, counseling and program improvement, including a mobile plastics laboratory which serves four different school districts a year. In addition, $1 million in federal funds and $1 million in state funds are made available annually for the purchase of high-technology equipment.

Vocational programs offered by local education agencies include agriculture, business office education, consumer and occupational home economics, cooperative work education, health occupations, marketing education, technology education and trade and industrial education. Since 1986, local school districts, in cooperation with regional community colleges, have jointly approved curricula that will award college credit through high school vocational programs.

Specific job skills, interpersonal and communication skills and the work ethic are promoted through classroom, laboratory and supervised occupational experiences. The applications identified in Connecticut's Common Core of Learning have been integrated into, and are being reinforced by, the vocational education curriculum. The Principles of Technology, an applied physics course team-taught by technology education and science instructors, was piloted in five school districts in 1989-90. High priority has been placed on ensuring that students will graduate from high school vocational programs with enhanced expectations and prospects for the 21st century.

On June 28, 1989, the State Board of Education adopted A Policy Statement on Vocational-Technical Education in Comprehensive Secondary Schools which endorses vocational education for all students. The policy states, in part:

> *The experiential learning provided by vocational education is for all students. Vocational education and the general academic subject areas are partners in the educational experiences offered to young people. Clearly, vocational education is an instructional process as well as a body of knowledge. It provides unique opportunities for all students to develop responsibility, motivation, and interpersonal skills, while at the same time it expands their ability to reason, learn, and problem-solve. All these are essential elements contained in Connecticut's Common Core of Learning, and lead to the development of student self-esteem and a respect for the dignity of work. Vocational education, through experiential learning, will help all Connecticut students attain the goals inherent in the Common Core of Learning. Every student should be offered the opportunity to benefit from a quality vocational education experience.*

Regional Vocational-Technical School System. The state's Regional Vocational-Technical School System offers a wide range of full- and part-time vocational programs for secondary-level students, adults and apprentices. The 17 vocational-technical schools and 4 satellites located in 21 towns provide vocational-technical education in 44 occupational areas on a regional basis. The system is committed to providing a secondary academic program that meets the statutory requirements for high school graduation and offers intensive occupation-specific training below the associate's degree level. In addition, theory training is provided for the 6,4[illegible] registered apprentices in the state; short-term, entry-level bilingual vocational training is provided for bilingual adults; and, through the extension program, any interested adult can receive vocational-technical training.

The system offers shared-time programs for students in Grades 9-12 who cannot attend on a full-time basis; exploratory programs for students in Grades 7 and 8, to acquaint them with the career options of the Vocational-Technical School System; and a summer school program that offers exploratory, skill building and remediation.

In order to effectively examine enrollment in the Vocational-Technical School System, it is necessary to determine the significant growth or change factors occurring in the total school-age population. Since 1971, which was the peak of elementary and secondary enrollment in Connecticut, there has been a steady decline in enrollments which reflects the overall decrease in the total school-age population. Since 1987 the statewide secondary enrollment has declined by approximately eight percent. Despite this, the Vocational-Technical School

Enrollment Comparison
1979-1989

Oct. 1	Vocational-Technical School—Secondary Full-Time Day 9-12	Public School 9-12	% Enrolled in Vocational-Technical Schools
1989	10,144	126,870	8.0
1988	10,484	132,776	7.9
1987	10,882	138,803	7.8
1986	11,352	148,176	7.7
1985	11,934	153,325	7.8
1984	12,086	157,057	7.7
1983	12,408	161,743	7.7
1982	12,324	166,675	7.4
1981	12,276	173,895	7.1
1980	11,996	181,818	6.6
1979	11,604	187,722	6.2

Source: Connecticut State Department of Education

Vocational-Technical School System
Enrollment by School and by Program
October 1, 1989

Location	Secondary Enrollment	Secondary Shared-Time Enrollment	Long-Term Adult Full-Time Enrollment	Adult Apprentice Enrollment	Short-Term Adult Enrollment	Total
Ansonia	446	*	14	0	0	460
Bridgeport	915	47	192	683	431	2,268
Danbury	549	*	16	185	94	844
Danielson	490	-	158	66	256	970
Groton	670	*	28	1,131	190	2,019
Hamden	696	-	129	1,009	219	2,053
Hartford	570	-	132	1,069	205	1,976
Manchester	440	*	7	581	132	1,160
Meriden	682	-	56	102	149	989
Middletown	505	-	32	27	42	606
Milford	789	-	36	0	0	825
New Britain	669	72	63	257	21	1,082
Norwich	507	29	54	31	14	635
Stamford	443	-	107	219	17	786
Torrington	580	19	0	163	42	804
Waterbury	749	*	94	889	270	2,002
Windham	444	-	49	0	0	493
Subtotal	**10,144**	**167**	**1,167**	**6,412**	**2,082**	**19,972**
Satellites	Secondary Part-Time					
Bristol	100	0	13	8	67	188
Enfield	33	0	35	0	0	68
Essex	55	0	13	0	0	68
Stratford	46	-	92	0	0	138
Subtotal	**234**	**0**	**153**	**8**	**67**	**462**
Total	**10,378**	**167**	**1,320**	**6,420**	**2,149**	**20,434**

* Shared-time program not operational until after October 1, 1989

Source: Connecticut State Department of Education

System has continued to serve an increasing percentage of the available public school secondary population.

In addition, the female population in the Vocational-Technical School System rose approximately 7.4 percent from October 1, 1980, to October 1, 1989, resulting in an actual female enrollment of 2,881 or 28.4 percent.

In 1980, the special education enrollment represented 5.9 percent of the vocational-technical schools' enrollment in Grades 9-12. By 1989, the percentage had risen to 15.3 percent, which exceeds the state average. (See the table below.) There also has been an increase in the regional vocational-technical schools in the types of handicapping conditions and the number of services provided.

A student who graduates from a state vocational-technical school receives a high school diploma with his or her trade area indicated. The table at the top of page 38 contains data on the employment, postsecondary education and other activities of recent vocational-technical school graduates.

Equity in vocational education. A goal of vocational educators is to decrease sex stereotyping, in part by increasing the percentage of male and female students completing nontraditional vocational programs. A vocational program that is nontraditional for one sex was defined in 1981 as one in which at least 80 percent of the participants were of the opposite sex. In recent years there has been measurable progress toward reversing sex stereotyping, although 1989 figures show movement away from this trend. As the table on page 39 shows, the percentage of female students completing traditionally male programs rose from 1.9 percent in 1980 to 5.3 percent in 1985, to 5.6 percent in 1987 and 9.1 percent in 1988, then fell to 7.1 percent in 1989. The percentage of male students completing traditionally female programs increased from 15.9 to 23.6 percent between 1980 and 1985, decreased to 20.4 percent in 1987, increased in 1988 to 22.4 percent, and in 1989 moved downward again to 21.7 percent.

Program completers. During 1988-89, 33,452 secondary students in Grades 11 and 12 were enrolled in occupational programs in local education agencies and the regional vocational-technical schools. Follow-up studies in February 1990 indicated that 16,708 of these students completed their programs in 1989. The largest number of completers (8,743 or 52.3%) was in the Business and Office program category.

The same studies found that of the 5,772 secondary program completers who were available for civilian employment, 5,472 or 94.8 percent found jobs. Of those who were working in February 1990, 67.6 percent were employed full time in a field related to their training. (See the table on page 40.)

Other options chosen by 1989 vocational program completers on the secondary level included additional education (47.1%) and the military (2.9%).

Connecticut's strong economy during the mid to late 1980s resulted in fairly consistent declines in the unemployment rates of the population as a whole and of various subgroups in the state. In 1989, as the economy began to weaken, unemployment rates increased for all groups. (See the table at the bottom of page 38.) However, graduates of regional vocational-technical schools continued to experience an unemployment rate (5.4%) lower than that of local education agency graduates (6.6%) and that of 16- to 19-year-olds statewide (11.8%).

Collaborative Vocational Programs

The outreach and effectiveness of a number of vocational programs can be attributed to their collaborative nature, with several agencies or organizations joining forces to serve a particular need.

Vocational-Technical School System
Enrollments in Secondary Full-Time
Day Programs

School Year	Total	Minority	Percent Minority	Handicapped	Percent Handicapped	Females	Percent Female
1989-90	10,144	2,501	24.7	1,557	15.3	2,881	28.4
1988-89	10,484	2,378	22.7	1,541	14.7	2,881	27.5
1987-88	10,882	2,386	21.9	1,386	12.7	2,963	27.2
1986-87	11,352	2,367	20.9	1,304	11.5	3,045	26.8
1985-86	11,934	2,371	19.9	1,261	10.6	3,131	26.2
1984-85	12,086	2,250	18.6	1,176	9.7	3,052	25.3
1983-84	12,408	2,100	16.9	1,070	8.6	2,989	24.1
1982-83	12,324	2,045	16.6	989	8.0	2,822	22.9
1981-82	12,276	na	na	813	6.6	2,673	21.8
1980-81	11,996	1,693	14.1	705	5.9	2,521	21.0

Source: Connecticut State Department of Education

Vocational-Technical School System
Graduate Information
1989

Activity		Male	Female	Total	Percent of Subtotal	Percent of all Graduates
Postsecondary Education	4-year	107	51	158	34.2	
	2-year	174	64	238	51.5	
	Other	43	23	66	14.3	
Total Education		**324**	**138**	**462**		**21.1**
Career-Related Activities						
Military Service		77	7	84	6.1	
Employed		954	278	1,232	88.9	
Unemployed		55	15	70	5.0	
Total Career		**1,086**	**300**	**1,386**		**63.2**
Miscellaneous						
Full-time Homemaking		-	-	-	-	
Other		19	25	44	12.8	
Deceased/Incapacitated/Unknown		227	73	300	87.2	
Total Miscellaneous		**246**	**98**	**344**		**15.7**
Grand Total		**1,656**	**536**	**2,192**		

Source: Connecticut State Department of Education

Unemployment Rates* of High School Graduates versus Statewide Rates

	-------- Percent Unemployed --------------			
Year of Graduation	Local Education Agency Graduates	Regional Vocational-Technical School Graduates	State-wide 16 - 19 Year Olds	Total State-wide
1989	6.6	5.4	11.8	3.7
1988	5.1	3.2	8.7	3.0
1987	5.2	2.4	11.1	3.3
1986	6.9	1.6	12.5	3.8
1985	8.5	3.5	14.7	4.9
1984	11.8	4.0	13.3	4.6
1983	13.6	3.1	16.5	6.0
1982	13.3	8.2	18.3	6.9
1981	12.6	6.1	17.2	6.2

* Excludes military employment

Source: Connecticut State Department of Education

Jobs for Connecticut Youth. For eight years, Jobs for Connecticut Youth (JCY) has been one of the State Department of Education's primary initiatives for addressing the needs of young people in Connecticut who are considered to be at risk. (According to the JCY definition, "at-risk" youth are educationally and/or economically disadvantaged, 14 to 24 years of age, with barriers to employment.) Implemented in 1982, JCY was supported by a foundation grant and federal vocational resources. Upon the termination of the grant, the State of Connecticut supported the activity through legislative appropriations within the State Department of Education's budget.

The uniqueness of JCY has been its emphasis on regional coordination and program flexibility. Emphasizing the critical importance of providing services that are responsive to community priorities, JCY has developed and delivered programs and services which include basic skills, remedial instruction, work experience, English as a second language, vocational skill training, mentoring, employability skills and supportive services. Primary populations receiving services have been teen parents, youth with limited English proficiency, ex-offenders, dropouts and potential dropouts. From 1982 to 1989, more than 11,300 youth were enrolled in JCY programs.

Nontraditional Vocational Program Completers

	Percent of Males Completing				
Traditionally Female Programs	1980	1985	1987	1988	1989
Overall	15.9	23.6	20.4	22.4	21.7
Child care	1.3	0.0	1.9	7.1	9.3
Clothing Management	4.8	3.8	7.3	0.0	6.0
Cosmetology	1.2	13.8	7.2	3.5	8.6
Clothing Management	0.0	0.0	0.0	0.0	0.0
General Office	22.1	28.2	26.6	30.7	30.0
Nursing Assistant	5.6	2.8	5.7	5.6	6.0
Secretarial	2.5	7.4	7.5	9.2	4.3
	Percent of Females Completing				
Traditionally Male Programs	1980	1985	1987	1988	1989
Overall	1.9	5.3	5.6	9.1	7.1
Agricultural Mechanics	26.1	4.0	11.1	4.9	5.4
Air Conditioning	0.0	0.0	1.1	9.4	1.9
Appliance Repair	0.0	10.2	0.0	20.0	16.7
Automobile Trades	2.0	4.8	4.9	5.8	4.7
Construction Trades	1.4	4.2	0.1	7.3	6.0
Electronics/Industrial Electronics	2.7	9.3	15.6	16.0	17.3
Forestry	25.0	25.0	-	-	-
Machine/Tool Shop	0.1	2.9	5.4	9.5	7.1
Natural Resource Renewal	10.5	0.0	37.1	28.1	27.8
Small Machine Repair	1.3	34.1	19.2	15.4	0
Welding/Sheet Metal	0.0	3.8	7.6	29.0	4.1

Source: Connecticut State Department of Education

Central to the concept of JCY has been regional coordination. In each JCY region, Area Action Teams comprised of representatives from diverse sectors of the youth-serving community provide oversight and direction. The strategy of JCY has been not only to deliver needed services but also to improve the planning and delivery system with the goal of achieving a coordinated system that effectively and efficiently leverages resources, prevents duplication of effort and advocates for at-risk youth.

In 1989-1990, JCY programs, in combination with other state, federal, local and private funds, enrolled more than 880 at-risk youth. Examples of programs include basic skill remediation, mentoring for minority males, career awareness, office skills training, teen parent assistance, computer-assisted remediation for potential dropouts, precollege counseling for in-school at-risk youth, English as a second language (ESL), school-to-work transition for handicapped youth, and truancy prevention/intervention for Hispanic youth. JCY also sponsored a career awareness program for all 8th grade students (a total of 1,200) in one city and for more than 600 middle school students in another urban community.

In 1989, the State Department of Education sought to coalesce resources for disadvantaged populations by combining JCY funds with resources from the Carl D. Perkins Vocational Education Act (for services to single parents, displaced homemakers, adults in need of training/retraining) and the Job Training Partnership Act (JTPA)/Education Coordination and Grants program (8%). In 1989 and 1990, additional resources for basic skills were contributed by the Department of Income Maintenance for remediation programs for Job Connection clients and

Placement Status (February 1990)
of 1989 Vocational Program Completers

	Local Education Agencies		Regional Vocational-Technical Schools Secondary Level	
	No.	%	No.	%
Total	14,516	100.0	2,192	100.0
Pursuing Education	7,414	51.1	462	21.1
Employed	4,240	29.2	1,232	56.2
Military	393	2.7	84	3.8
Unemployed*	230	1.6	70	3.2
Other**	2,239	15.4	344	15.7
Completers in full-time jobs related to training	2,607	18.0	1,091	49.8
Average Hourly Wage	$6.49		$7.70	

Students enrolled in industrial arts, consumer home economics, and short-term, part-time, exploratory and apprentice programs not included.

* As percent of all graduates including those not seeking employment.

** Not seeking employment or status unknown.

Source: Connecticut State Department of Education

by the Department's Bureau of Adult Education through the federal Adult Education Act. This new grant, Coordinated Education and Training Opportunities (CETO), enables Area Collaboratives to identify local needs, adopt goals and objectives, issue local requests for proposals, support essential services, and evaluate programs. Comprised of mandated and nonmandated members who represent community organizations, the private sector and public agencies, the collaboratives are client centered and focus on meeting the long-term needs of individual clients in order to improve their skills and obtain long-term, meaningful employment.

CETO reflects state priorities which recognize the critical importance of directing resources to disadvantaged populations through state and local collaboration. As the core of CETO, JCY specifically demonstrates Connecticut's commitment to at-risk youth. It represents the only state General Fund money dedicated to coordinating employment and training for youth and to "recapturing" dropouts. At $500 per client enrolled, JCY is one of the most cost-effective programs in state government. Investments in programs for at-risk youth are responsible for saving millions of state dollars in the form of reduced costs for prisons, substance abuse and welfare programs.

The collaborative grants program is funded with resources from the Carl D. Perkins Vocational Education Act; Adult ($648,621), Single Parent/Homemaker ($655,035), and CBO ($89,290) allocations; State Department of Income Maintenance JOBS ($565,000); JTPA 8% ($531,028); Jobs for Connecticut Youth (JCY) funds ($594,000); and $558,621 in the Carl D. Perkins Vocational Education Act 1988-89 carryout funds.

CETO is an approximately $3.8 million grant program for regional, collaborative, client-centered service delivery systems. The program serves more than 4,500 clients per year statewide and targets each region's hardest-to-serve population. Services offered include, but are not limited to, remediation, basic skills training, counseling, skill training, GED preparation, transportation and child care. The CETO initiative has included the standardization of data collection systems across funding sources and agencies and the development of outcome measures. During 1989-90, a comprehensive needs assessment of services to homemakers and single parents in CETO was implemented, as was a third-party evaluation of the CETO system.

Gender Equity

Gender equity is rooted in the notion that excellence in education must include addressing issues of diversity in all aspects of education and the learning continuum. To that end, the Division of Vocational, Technical and Adult Education Gender Equity Unit designed a program of education, training, nontraditional learning opportunities, publications and programs directed at creating long-term systemic change. Central to this effort was the creation of the Vocational Equity Resource, Training and Evaluation Center (VERTEC) at the University of Connecticut.

In addition to VERTEC, a competitive grants program funded by the Carl D. Perkins Vocational Education Act was implemented. The grants seek to provide nontraditional opportunities and programs and services that reduce bias. During the program year 1989-90, 17 grants were awarded to promote gender equity. Priorities were to fund grants for programs to increase enrollment in occupational education or training programs considered nontraditional for the gender of the participant and for programs for women of color. Clients were served by a variety of programs from skilled training to conferences and workshops on eliminating gender bias in vocational programs. A total of 1,508 individuals were served.

Highlights of the 1989-90 program included:

- Publication of "Strategies for Success" — Recruiting Students into Nontraditional Programs;
- Doubling the enrollment of females in nontraditional training in one vocational-technical school;
- Developing five support groups around the state for women in or entering nontraditional occupations;
- Coordinating two bilingual (Spanish-English) nontraditional occupations skill training programs; and
- Presenting five half-day training seminars for vocational and technical school teachers and administrators. The seminars included statistical and sociological information about girls and women in vocational education and employment, legal information about gender equity, and a review of (1) strategies for ensuring equal opportunity for females and males and (2) the "Sexual Harrassment Protocol."

Adult Education

Adult Education programs provide basic skills programming to youth and adults 16 years of age or older who are not enrolled in a regular school program. Offered primarily through local school districts and community-based organizations, basic skills programs include classes in elementary and survival skills, secondary school completion, English for limited-English-proficient adults, and Americanization.

The Bureau of Adult Education is responsible for approving and monitoring approximately 85 private occupational schools and branches which provide educational training. It is also responsible for approving programs at 275 educational institutions, so that veterans and other eligible persons may receive veterans' benefits.

Basic skills. A serious challenge in adult education continues to be basic skills programming. Connecticut law requires every school district to provide basic skills instruction for its residents or to make cooperative arrangements with another school district or regional educational service center to do so. In 1988-89 and 1989-90, 65 programs (offered by local school districts, community-based organizations and regional educational service centers) provided adult education basic skills programs to 112,704 individuals. Although efforts to increase enrollments continue to be of major importance, improving delivery systems, increasing accessibility and expanding collaborative ventures with other agencies and funding sources have become significant issues.

Adult High School Diploma Program. This program more closely resembles the credit structure of day diploma programs. However, it provides a variety of options such as credit for experiential learning, individualized learning packets and the ability to testout (pass a specific subject matter test) for credit for previously acquired knowledge. These options are providing many adults with the flexibility they need to obtain a high school diploma. In addition to the successful General Educational Development (GED) home study model, another enhancement to the GED program involves the establishment of the honors GED diploma for those who score at least 300 on the battery with no one score less than 55. Since the program began in 1986, approximately 1,750 adults have received the honors diploma.

Connecticut Adult Performance Program (CAPP). The expansion of this program continues to be a major undertaking in adult education. CAPP is designed to provide for greater accountability through the integration of basic skills instruction with competencies based upon real life experiences. Instruction focuses on improving basic academic skills and English for those who are limited English proficient. Essential elements of CAPP include the coordination of management, assessment, counseling and instructional systems. During 1988-89, 49 adult education programs implemented CAPP. All districts will have implemented CAPP by 1990-91.

Combined with the CAPP initiative, a support system of adult education institutes was designed to assist in the transition to a competency-based system. The institutes initially focused on English-as-a-second-language instruction; however, this initiative has expanded its services by offering training for teachers of basic skills and educational client managers (counselors). During 1990-91, offerings will expand to assist program directors in utilizing data results to manage their programs more effectively.

Increased collaborative efforts with the Departments of Income Maintenance and Labor and the Division of Rehabilitation Services have resulted in pilot programs that are testing the efficacy of the CAPP system with clients of those agencies. The goal of bringing about a uniform, statewide assessment system continues to show promise.

Connecticut Coalition for Literacy. During 1988-89 and 1989-90, the Coalition for Literacy continued to serve as the leading catalyst for outreach and awareness activities. As a result of the Coalition's recommendations, seven regional literacy coalitions received grants to conduct awareness, recruitment and fundraising activities. The Coalition participated in campaigns sponsored by the national Project Literacy U.S. (PLUS) effort, and worked with radio, television and newspapers to increase coverage of illiteracy issues. A quarterly newsletter kept educators, business people and elected officials aware of activities in the state. A major accomplishment was the selection of a communications agency with which the Coalition will work during the next two years to design and implement a statewide outreach campaign aimed at recruiting the least educated of Connecticut's citizens. Finally, the governor appointed a new chairman and 17 new members of the Coalition.

Future directions include continued training for professionals and continued efforts to expand educational opportunities for adult learners. Efforts will focus on legislative changes that guarantee educational services for all adults who need them,

Profile of Mandated Adult Education Populations

Age

	16-24		25-44		45-59		60+		
Year	No.	%	No.	%	No.	%	No.	%	Total
1989-90	24,447	40.8	27,038	45.0	7,119	11.9	1,387	2.3	59,991
1988-89	20,558	39.0	24,090	45.7	6,378	12.1	1,687	3.2	52,713
1987-88	17,414	37.5	21,228	45.7	6,312	13.6	1,463	3.2	46,417
1986-87	17,415	37.6	21,769	47.0	5,651	12.2	1,482	3.2	46,317
1985-86	19,271	41.0	21,449	45.6	5,150	10.9	1,183	2.5	47,053
1984-85	17,839	41.1	19,954	46.0	4,503	10.4	1,087	2.5	43,383
1983-84	16,762	40.8	18,244	44.4	5,161	12.6	897	2.2	41,064

Race/Sex

Year	American Indian	Asian/ Pacific Islander	Black	White	Hispanic	Total	Percent Minority	Percent Female
1989-90	144	5,432	11,167	24,869	18,379	59,991	58.5	58.5
1988-89	133	4,097	9,467	23,561	15,455	52,713	55.3	60.1
1987-88	104	3,738	7,923	21,478	13,174	46,417	53.7	60.7
1986-87	184	3,592	8,926	21,120	12,495	46,317	54.4	60.5
1985-86	119	4,110	9,604	20,620	12,600	47,053	56.2	57.6
1984-85	107	3,469	8,855	18,654	12,302	43,383	57.0	56.9
1983-84	114	3,440	8,866	17,980	10,664	41,064	56.2	54.3

Source: Connecticut State Department of Education

seek increased funding for service providers and expand the range of providers (to include community-based organizations, community and technical colleges, vocational-technical schools and volunteer groups as well as local school districts). Regionalization will be encouraged as a means of providing more comprehensive services and making programs more accessible to adults. In order to address concerns regarding a decline in the state GED pass rate, the bureau will intensify its efforts to assist GED preparation sites to prepare participants more effectively. All of these efforts may produce a significant challenge as varying demands for funds and reduced resources continue to affect the financial picture.

Child Nutrition Programs

The State Department of Education serves the nutritional needs of schoolchildren in both the public and private sectors through its administration of several federally funded child nutrition programs.

The number of children receiving free or reduced-price lunches steadily declined from 1985-86 through 1988-89, but increased in 1989-90. Those receiving free or reduced-price lunches now represent 34 percent of the total number of students participating in the National School Lunch Program. The number of children paying full price has declined for three years. This can be attributed to two factors: the increased cost of lunch and the increased sale of a la carte items.

The Special Milk Program has remained relatively stable over the past several years.

Due to a state initiative begun in the 1986-87 school year, participation in the School Breakfast Program has increased by 275 percent since 1985-86, with a particularly dramatic increase of 8,875 participants between 1988-89 and 1989-90.

A statistical profile of child nutrition programs in Connecticut follows.

A Profile of Child Nutrition Programs in Connecticut

School Breakfast

Fiscal Year	Total	Paid	Free	Reduced
1989-90	24,782	5,764	17,777	1,241
1988-89	15,907	3,973	11,934	796
1987-88	11,517	921	10,250	346
1986-87	9,523	748	8,586	189
1985-86	6,607	554	5,949	104
1984-85	8,555	661	7,792	102
1983-84	8,813	696	8,027	90
1982-83	7,571	649	6,836	86
1981-82	5,924	647	5,161	116
1980-81	5,865	795	4,937	133
1979-80	10,469	4,460	5,714	295
1978-79	7,362	3,487	3,604	271

National School Lunch

Fiscal Year	Total	Paid	Free	Reduced
1989-90	211,637	139,457	60,929	11,251
1988-89	214,530	145,428	58,242	10,860
1987-88	221,640	150,715	59,843	11,082
1986-87	216,447	139,130	64,895	12,442
1985-86	207,926	129,106	66,314	12,506
1984-85	212,447	128,403	70,725	13,319
1983-84	207,884	119,350	75,221	13,313
1982-83	206,168	117,706	74,645	13,817
1981-82	203,420	110,548	75,991	15,388
1980-81	199,044	110,398	71,775	16,871
1979-80	262,840	151,741	89,286	21,813
1978-79	279,799	170,308	87,527	21,964

Special Milk Program

Fiscal Year	Total	Paid	Free
1989-90	29,669	27,642	2,027
1988-89	28,814	26,884	1,930
1987-88	29,228	27,115	2,113
1986-87	27,700	25,820	1,880
1985-86	25,509	23,410	2,099
1984-85	25,960	23,732	2,228
1983-84	28,068	25,323	2,745
1982-83	28,798	26,243	2,555
1981-82	29,672	26,824	2,848
1980-81	33,110	29,791	3,319
1979-80	194,602	178,709	15,893
1978-79	231,602	213,873	17,729

Source: Connecticut State Department of Education

Learners With Special Needs

Substantial amounts of time and energy are devoted to improving educational opportunities for learners who need some form of special help in order to achieve their full potential. Most of these programs are administered by the Division of Education Support Services and the Division of Rehabilitation Services.

Compensatory education. Under the state's Education Evaluation and Remedial Assistance Act, school districts are required to use assessment results for instructional improvement, identify individual students in need of remedial assistance, provide remedial assistance to identified students, and evaluate instructional programs in basic skills.

Compensatory education programs supported through Chapter 1 of the federal Elementary and Secondary Education Act, together with the state's Education Evaluation and Remedial Assistance Act, provide local school districts with funding to meet the needs of educationally disadvantaged children. In 1989-90, state and federal funding for grants to local school districts totaled $52,648,643. Districts use funds primarily to support supplementary programs in remedial mathematics, reading and language arts for both public and nonpublic school students.

Normal curve equivalent (NCE) gains for 1987-88 were positive in both mathematics (+5.4 NCEs) and reading (+4.0 NCEs). In the three previous biennial assessments, NCE gains in both areas were higher than those recorded in 1987-88. (Note: 1989-90 data on compensatory education achievement will be available in the summer of 1991.) It should be noted that some districts switched from a fall/spring testing cycle to an annual testing cycle during this period. Gain scores over a fall/fall or spring/spring testing cycle are usually lower than those for fall/spring testing cycles.

While enrollment in compensatory education programs dropped from a high of more than 60,000 in 1979-80 to approximately 44,000 in 1982-83, it moved back up to 54,474 by 1986-87, dropping back slightly to 54,175 in 1987-88 but rising again to 58,196 in 1989-90. This represented 10 percent of the total enrollment in both public and nonpublic schools, a percentage which has changed little in the past five years.

Compensatory Education Achievement

Year*	Overall Mean Gain in Mathematics (in NCEs**)	Overall Mean Gain in Reading (in NCEs**)
1987-88	+ 5.4	+ 4.0
1985-86	+ 5.6	+ 6.4
1983-84	+ 7.9	+ 7.1
1981-82	+ 6.7	+ 6.8

* Achievement data are collected biennially.

** Normal Curve Equivalents (Note: A positive NCE gain is considered to be evidence of meaningful educational growth.)

Source: Connecticut State Department of Education

A comparison of Connecticut's compensatory education staffing pattern to the nation's shows that, in 1985-86, Connecticut employed a higher percentage of teacher aides (45 vs. 38), a lower percentage of teachers (42 vs. 47) and a similar percentage of administrators (2 vs. 3). National data for subsequent years are not available. However, by 1989-90, the percentage of teachers employed in Connecticut's compensatory education programs increased to 44 and the percentage of teacher aides declined to 43, while the percentage of administrators remained steady at 2.

Federal and state guidelines and procedures for planning, monitoring and evaluating compensatory education programs have been consolidated by the State Department of Education. During 1989-90, one-third of the school districts were monitored for compliance with these consolidated guidelines under the state's Program Compliance Review procedure.

Neglected and delinquent. Children who are institutionalized for neglect or delinquency often fail to achieve much academic success in school. These children receive services through the school district Chapter 1 program. In addition, in 1989-90, $490,463 were awarded to state correctional institutions and state institutions for neglected and delinquent students. These institutions served 1,947 young adults under the age of 21.

Migrant education. The Connecticut Migratory Children's Program offers a wide range of services to eligible migrant students. School-year and summer programs offer supplemental instruction in basic skills, home-based preschool and family literacy instruction, middle and high school advocacy and counseling, and social and health support.

In 1989-90, nine communities, eight of which were Priority School Districts, participated in the migrant program. Of 3,282 eligible migrant students, approximately 3,000 were provided some type of support service through home visits or school referrals; approximately 600 students received instructional services. Approximately the same number of students were expected to be served in the migrant program during 1990-91.

Students in the migrant programs continued to demonstrate normal curve equivalent (NCE) gains in both reading and mathematics. A change in federal regulations requires that achievement data now be collected in both basic and more advanced skill areas. Matched pre- and posttest scores were available for approximately half of the students tutored in reading and mathematics. Achievement gains in basic reading were measured at 1.4 NCEs in 1989-90, and in the more advanced skill of reading comprehension, gains of 1.6 NCEs were attained. NCE gains were measured at 1.4 in basic mathematics and at 1.1 in the more advanced skill area (usually

Number of Students Eligible for Programs for Neglected or Delinquent Children

	State*			Local	
Year	Neglected	Delinquent	Adult Correctional	Neglected	Delinquent
1989**	47	173	309	1,083***	
1988	44	188	302	1,095***	
1987	55	123	371	657	407
1986	37	126	416	634	478
1985	41	93	1,314	620	449
1984	35	58	1,259	621	419
1983	47	58	1,263	580	523
1982	34	24	1,008	603	506
1981	40	14	573	822	310
1980	37	12	971	782	298
1979	52	77	749	684	262
1978	54	135	695	531	77
1977	56	135	676	562	69

* The Department of Children and Youth Services provides programs for neglected at the Albert P. Redway School, Warehouse Point, and for delinquent at the Long Lane School. The Department of Correction runs the program for institutionalized young adults 16 to 21 years old.

** Eligible students are served in the following school year.

*** Total local neglected/delinquent count

Source: Connecticut State Department of Education

a problem-solving subtest). Although these achievement gains are not as large as those observed in previous years, they are a result of pretests and posttests administered at a 12-month interval, rather than fall to spring. (See table below.)

Priority School District Program. The Priority School District Grant Program has a clear statement of purpose: "to assist the school districts with the greatest demonstrated academic need to improve student achievement and enhance educational opportunities," with the primary focus on basic skills achievement and the improvement of instruction.

Priority School District Program activities, planned cooperatively by school districts and the State Department of Education, supplement other resources of Connecticut's educational community to provide direct services to school districts. Department goals include establishing more effective State Department of Education and school district partnerships and targeting more services, materials and technical assistance resources to these districts.

These resources, to the greatest possible extent, enhance successful ongoing activities and facilitate new planning, development, evaluation and training initiatives.

During the 1987-88 through 1989-90 period, 25 school districts with a combined enrollment of more than 150,000 participated in the Priority School District Grant Program.

The second triennial evaluation of the program prepared by the University of Connecticut included the following comments:

- . . . Priority School District Program activities continue to be implemented as planned in district action plans. This implementation is characterized by a most successful level of partnership and communication between the districts and the Department.
- Against the criterion of the Connecticut Mastery Test, the 25 Priority School Districts as a group have shown improvement over the years. For an overall measure of achievement performance, the Percent of Subtests Above the Remedial Standard, the gaps between the Priority Schools and the Non-Priority Schools and the overall State have not increased and show a trend toward decreasing slightly from 1986 to 1989. Overall, the growth in achievement of the aggregate of 25 districts is similar to the Non-Priority School districts and the State in the areas of Mathematics and Total Reading and is associated with a higher level of growth than these comparison groups in Reading Comprehension.
- . . . there are several strengths of the program that should be reinforced. In particular, we note that the Board's *Guidelines* to the program, along with their annual amendments and improvements, are a model for ongoing program development, implementation and evaluation. We also note the effective Department and district partnerships underlying the implementation of negotiated action plans that focused on district identified needs and priorities. In addition, the many evidences of district institutionalization and capacity building for several program activities are important accomplishments that contribute to a continuous cycle of school improvement. Finally, a particular strength was the early and ongoing focus on identifying and evaluating program outcomes.
- While the program has been successful in accomplishing its goal, program needs are identified in three

Migrant Programs

Fiscal Year	Districts	Students	NCE* Achievement Gains Reading Basic	Reading Advanced	Mathematics Basic	Mathematics Advanced
1989-90**	9	3,257***	+1.4	+1.6	+1.4	+1.1
1988-89	9	3,390	N/A #		N/A #	
1987-88	10	3,872	+2.0		+7.4	
1986-87	11	4,056	N/A #		N/A #	
1985-86	12	4,063	+2.3		+3.6	
1984-85	14	3,841	N/A #		N/A #	
1983-84	15	3,671	+3.9		+1.5	
1982-83	14	3,536	+2.9		+3.8	
1981-82	13	3,509	+6.2		+5.1	

* Normal Curve Equivalents (Note: A positive NCE gain is considered to be evidence of meaningful educational growth.)

** In 1989-90, achievement gains were reported by levels (basic and advanced) for the first time.

*** Total eligible students; matched pre- and posttest scores were available for about half of the approximately 600 students who were tutored in 1989-90.

# Achievement is now assessed biennially.

Source: Connecticut State Department of Education

Number of Students Served in State-Mandated Bilingual Education Programs

	1984- 85	1985- 86	1986-87	1987-88	1988-89	1989-90
Spanish	10,493	10,726	11,054	11,403	11,573	12,037
Portuguese	261	228	183	205	191	241
Laotian	135	121	152	125	96	113
Vietnamese	125	111	89	57	43	98
Cambodian	121	145	142	85	58	58
Italian	42	47	41	35	29	23
Polish	30	72	69	45	66	92
Haitian/Creole	0	32	65	94	114	133
Total	11,207	11,482	11,795	12,049	12,170	12,795

Source: Connecticut State Department of Education

areas: increased focus on the Connecticut Mastery Test as the primary indicator of student achievement, increased emphasis on building- and classroom-level school improvement interventions, and the reconsideration of the merits of a prescribed standard program intervention.

- On the basis of the findings presented in this report, it is clear that the Priority School District Program has accomplished its statutory goal of assisting in the improvement of student achievement and enhancing educational opportunities. It is recommended that the program be continued with a special focus (i.e., funding) on those districts with the greatest identified need (i.e., Hartford, Bridgeport, New Haven) while still allowing as many districts (e.g., 25 districts) to participate as possible.

Bilingual education. Bilingual education programs in Connecticut have two purposes: to enable students to become proficient in English and to provide students with comprehensible subject-area instruction.

Sections 10-17b-g of the Connecticut General Statutes require local districts to provide a bilingual education program

Expenditures for Bilingual Education Programs (In Millions)

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
Local	11.56 (52.4%)	18.63 (53.5%)	29.10 (73.7%)	34.47 (75.9%)	36.73 (77.9%)	37.15 (75.2%)
State	1.81 (8.2%)	1.91 (5.5%)	2.09 (5.3%)	2.20 (4.8%)	2.28 (4.8%)	2.16 (4.4%)
Other	8.68 (39.4%)	14.28 (41.0%)	8.30 (21.0%)	8.73 (19.2%)	8.12 (17.2%)	10.09 (20.4%)
Total	22.05	34.82	39.49	45.40	47.13	49.40

Source: Connecticut State Department of Education

Staffing Patterns in Bilingual Education Programs
(Full-Time Equivalents)

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
Administrator	11.0	10.8	11.9	11.5	13.6	12.7
Teacher	527.6	596.9	634.4	688.4	696.9	687.9
Aide	174.5	180.5	185.5	192.0	183.5	177.0
Support Service	24.2	39.1	57.3	72.7	77.0	78.4
Clerical Staff	11.4	13.3	12.3	13.4	13.4	12.0
Other	9.0	12.5	8.4	7.4	15.1	17.6
Total	757.7	853.1	909.8	985.4	999.4	985.6

Source: Connecticut State Department of Education

whenever there are, in any school building, at least 20 limited-English-proficient students who are dominant in a single non-English language.

Consistent with the two purposes stated above, state-mandated bilingual education programs have two components: English language acquisition and academic instruction. The language acquisition component is designed to develop and enhance students' listening, speaking, reading and writing skills in English. The academic component mirrors in scope and sequence the curriculum and instruction that is provided in English monolingual classes. The only difference is that the students' dominant language is used as the vehicle of instruction in order to make that instruction understandable. Ultimately, students make a transition from interpersonal, communicative English to academic English.

In the 1989-90 school year, 13 bilingual education programs served a total of 12,795 students; 12,037 (94%) of the program participants were dominant in Spanish. The remaining six percent — 758 students — was comprised of seven other linguistic groups. (See the table at the top of page 46.) Approximately 73.7 percent were in Grades K-5 and approximately 59.1 percent were in Grades K-3. Consistent with demographic trends for this population, it is expected that the number of bilingual education students will increase for the 1990-91 school year.

The population of students who are dominant in Spanish is highly mobile due primarily to the movement of students' fami-

Special Education Students

	------------------------ Percentage of All Students ----------------------			
Primary Disability	1977-78	1987-88	1988-89	1989-90
Autistic	-	0.03	0.03	0.03
Hearing Impairment	0.14	0.14	0.16	0.16
Learning Disabled	3.41	6.42	6.67	6.74
Mentally Retarded	1.34	0.85	0.86	0.82
Multihandicapped	-	0.21	0.23	0.25
Neurological Impairment	0.07	0.18	0.19	0.20
Orthopedic Impairment	0.09	0,06	0.06	0.06
Social/Emotional Maladjustment	1.47	2.69	2.65	2.58
Speech Impairment	2.30	2.63	2.50	2.52
Vision Impairment	0.04	0.12	0.12	0.12
Other Health Impairment	0.05	0.08	0.09	0.06
Uncategorized	0.34	0.34	0.57	0.67
Total Percentage	9.25	14.00	14.19	14.25
Total Number	57,003	65,427	64,323	64,775

Source: Connecticut State Department of Education

lies in and out of school districts. Of the 12,037 Spanish-speaking students served in the 1989-90 school year, 17.3 percent were late entrants or left the program prematurely.

The 1,064 students who left the program as of June 30, 1990, in order to enroll in English monolingual classes attained the following average scores in nationally-normed tests of English proficiency and achievement: 20th percentile in reading, 23rd percentile in language arts and 37th percentile in mathematics.

Special education. The number of Connecticut students receiving special education grew significantly during the 1980s. The increase in students was accompanied by additional program offerings and more special education teachers. Clearly, the mandated child-find efforts outlined in the federal Education for All Handicapped Children Act and Connecticut General Statutes Section 10-76b have influenced an increase in the percentage of students identified with education handicaps. State Department of Education observations have revealed that Connecticut's school districts have become increasingly familiar with the process of student evaluation and special education instruction.

During 1989-90, special education accommodations occurred for 14.25 percent (64,775 students) of the total student population. Recent observations of student prevalence indicate that the rate has steadied, as shown by negligible increases over previous years' rates. (See the table on page 47.)

The State Department of Education has moved to increase services for a broader spectrum of the population. Services to children with special education needs from birth to the age of 3 have been encouraged through federal legislative initiatives and state policy. At the other end of the spectrum, students who are ready to leave school are being prepared for the transition to independent living and work. In both cases, school districts have been attempting to work collaboratively with state agencies to plan these transitions to and from school.

Connecticut and federal legislation require special education students to be educated with their nonhandicapped peers to the maximum extent appropriate. In addition, special education placement priority must be given to the schools students would have attended if they were nonhandicapped. Connecticut data reveal that a high percentage of the special education students, nearly 89 percent, are educated in a public school within their district in a regular classroom, a resource room or a separate class. The remaining 11 percent of the population are reported to be in separate public facilities, approved private special education programs or home/hospital settings as their primary education location. Nearly 50 percent of the identified special education population is reported to spend 80 percent to 100 percent of their school week with nonhandicapped students. Another 18 percent of this student population is spending 40 percent or more of their school week with their nonhandicapped peers. Thus, more than two-thirds of the special education student population are encountering their nonhandicapped peers during the traditional school week.

Through the Special Education Resource Center (SERC), the State Department of Education has provided both regular and special education personnel with extensive training related to the placement of special education students into the least restrictive environment.

Gifted and talented students and pregnant students are excluded from the numbers reported as being served in special education programs. Yet, these students traditionally have been viewed as eligible for special accommodations within Connecticut's school districts. During the 1989-90 school year, this combined population totaled 11,768 students who were reported to be enrolled in programs established to meet their special needs.

Number of Local Public School Districts With Programs for Gifted and Talented Students

Fall of School Year	Level* Elementary	Middle/ Junior High	High School	No. of Districts With at Least One Program
1989	152	95	39	160
1988	151	92	39	160
1987	150	87	38	160
1986	149	85	38	159
1985	145	84	37	157
1984	137	80	33	140
1983	127	76	30	136
1982	121	72	28	134
1981	114	68	27	128
1980	109	63	25	123
1979	91	48	19	105
1978	77	42	20	92
1977	57	33	18	71
1976	46	28	12	62

* Of the state's 166 school districts, 158 have elementary schools, 125 have middle/junior high schools and 118 have high schools.

Source: Connecticut State Department of Education

Quality and Integrated Education

In Connecticut, racial and ethnic isolation are significant barriers to educational equity and excellence; overcoming that isolation has become a central objective of the State Board and State Department of Education. In April 1989, the Department issued a report, *Quality and Integrated Education: Options for Connecticut*, that recommended the expansion of several current activities which supported quality and integrated education. The report also recommended a number of new initiatives, including the establishment of a "blue ribbon commission" to develop a comprehensive agenda for integration.

In September 1989, Governor O'Neill established the Commission on Quality and Integrated Education. He appointed 28 members to the Commission including educators, legislators, town officials, students, business and labor leaders, and representatives of a local school board, the state parent teacher association and the League of Women Voters. Governor O'Neill asked David G. Carter Sr., president of Eastern Connecticut State University, and James P. Sandler, partner in the law firm Bryne, Slater, Sandler, Shulman and Rouse, to serve as co-chairmen of the Commission.

A consortium of five community foundations awarded a $100,000 grant to support the Commission's work. The participating foundations were the Bridgeport Area Foundation, the Fairfield Foundation, the Hartford Foundation for Public Giving, the New Haven Foundation and the Pequot Foundation (New London).

Deliberations began in October 1989. The Commission hired the McKenzie Group of Washington, DC, to provide national expertise on school desegregation issues and H.C. Planning Associates, Inc. of Orange, Connecticut, to provide projections on school enrollments through 1999 and projections on school construction needs.

The Commission also asked the Connecticut Institute for Social Inquiry to conduct a public opinion survey on issues related to school integration. Conducted in April and May 1990, the poll was designed to test public attitudes on integration and quality education. Results showed that educational quality was the primary concern. Quality was seen as a function of staff quality and size, and of special programs. In addition, the survey report said, "seven in 10 of the survey respondents agreed that 'making sure a school is racially and culturally mixed improves the quality of education for all students.'" While the responses to a number of questions indicated broad support for integrated schools, "the public sees little value in achieving numerical balance which may not help education and which treats students as members of classes," the report stated. The survey director concluded that the term "busing" seemed to embody this concept of numerical (racial) balance at the cost of quality. The public, therefore, will support integration when it works with or enhances quality, but not simply to achieve a racial balance.

In June 1990, H.C. Planning Associates issued their enrollment projections. The study focused on five metropolitan areas: Bridgeport, Hartford, New Haven, New London and Norwalk. According to the study, the percentage of minority students will continue to grow in all five metropolitan areas, but the rate of increase between 1989 and 1999 will be significantly slower than the increases experienced between 1984 and 1989. Further, these increases will occur primarily at the secondary school level.

After a series of discussions, the Commission adopted five tentative "findings" as a focus for its work:

1. ***Every Student Can Learn at High Levels.***
   - We need to understand what motivates students.
   - Students learn in different ways and at different rates.
   - The evaluation of learning outcomes that is limited to standardized pencil and paper examinations can mislead us about the skills and knowledge and capacity of individual students.

2. ***In Connecticut, Equal Educational Opportunity Does Not Yet Exist.***
   - In spite of over 10 years of efforts to equalize school funding, significant disparities in per pupil expenditures continue to exist.
   - Educational outcomes, as measured by the Connecticut Mastery Test program, vary significantly by district, by race and by income.
   - Educational outcomes are directly correlated with, but not caused by, the socioeconomic status of students and their families.

3. ***The Quality of Education is Enhanced by Diversity.***
   - In many districts, the curriculum does not provide a multicultural education.
   - Many schools and school systems are insufficiently diverse with regard to the racial, social and economic background of students and staff.
   - Racial and economic isolation is intensifying, especially in urban school districts; housing, income levels, social attitudes and transportation are barriers to correction.

4. ***There is a Need for Greater Parental and Community Involvement in Schools.***
   - Families confront many stresses as parent(s) maintain(s) job(s). This reduces opportunities for parental involvement in the education of their children.

5. ***Too Few Educators Are Prepared Either by Life Experience or by Professional Training to Teach a Diverse Student Population and Manage Cultural Diversity in the Classroom.***
   - There are too few minority teachers and administrators in the education profession.
   - Too few minorities are entering and completing four-year institutions or preparing for teaching careers.

- There are certification problems and issues of reciprocity between states which impede the recruitment of minority teachers from out of state.
- School districts are experiencing problems recruiting and retaining minority teachers.

A report on the Commission's recommendations was due to the Governor by December 31, 1990. *(For a discussion of the report, see page vii — Ed.)*

While providing staff support to the Commission and awaiting its report, the Department of Education directed energy and resources to a variety of new and ongoing efforts that address the issue of quality and integrated education in Connecticut. Instituted in 1989, the Teaching Opportunities for Paraprofessionals (TOP) program was designed to prepare school paraprofessionals (many of whom are members of minority groups) to become certified classroom teachers through university-based course work. The program was funded at $300,000 in 1989-90, with the understanding that the Department of Education would seek additional financial support from private sources — an effort which has met with some success. The first 25 paraprofessionals in the program were enrolled in January 1990; 80 percent of these paraprofessionals are members of minority groups.

The Interdistrict Cooperative Grant Program, funded at [illegible]039,000 in 1989-90 (a significant increase over the 1988-89 figure of $339,000), continued to provide funds to districts as an incentive to developing and implementing cooperative programs. Special consideration is given to proposals that advance quality, integrated educational programs. In 1989-90, funds were provided to 30 programs involving approximately 100 towns; 10,498 students were involved in activities supported by the grants. Funded programs included Project Equal, which offers teacher in-service training to work with a diverse student body, a science/mathematics program for 90 students, leadership development for 60 middle school students, and a cultural arts program for 150 students. Funding also was provided for implementation of an Interdistrict Montessori Program designed as a prekindergarten through Grade 6 magnet elementary school serving Hartford and West Hartford. Examples of other funded programs include a Regional Early Childhood Magnet School being developed by Cooperative Educational Services to serve 600 students in five communities (Bridgeport, Fairfield, Monroe, Stratford and Trumbull), and Enhancing Project Concern, which has as one of its objectives to increase awareness and understanding of Project Concern by disseminating factual materials, both written and audio, about the program.

Rehabilitation Services

The mission of the Division of Rehabilitation Services (DRS) is to create, through the provision of individualized rehabilitation services, an environment which enables persons with disabilities to become productive and independent. To carry out this mission, the division administers an array of rehabilitation services through the programs of vocational rehabilitation (VR), independent living (IL) and Social Security disability determination services.

DRS continues to emphasize programs which respond to the unique and multifaceted rehabilitation needs of individuals with severe disabilities. Efforts in this area include expanding vocational opportunities within the competitive labor force through supported employment; providing innovative services to persons with traumatic brain injury; developing linkages with school districts which facilitate the transition of students with disabilities into productive and self-sufficient adulthood; expanding the network of community-based independent living services; and facilitating consumer input into program planning and operations.

Vocational rehabilitation (VR) program. During 1989-90*, the vocational rehabilitation program provided services to 14,966 individuals with disabilities. Services included diagnostic evaluation, vocational counseling and guidance, physical and mental restoration, rehabilitation engineering consultation, technological aids and adaptive equipment, vocational and postsecondary training, and assistance in finding and maintaining employment.

A total of 6,871 individuals were referred to the VR program during 1989-90, a slight decrease from the previous year's total of 7,774. The number of individuals determined eligible for VR services, which reached a 10-year high of 3,920 in 1988-89, dropped slightly in 1989-90 to 3,607. The number of individuals rehabilitated also decreased slightly, from 2,081 in 1988-89 to 1,865 in 1989-90. These declines reflect the division's limited fiscal resources and the resulting restrictions on filling counseling staff vacancies.

Number of Clients Referred,
Accepted and Rehabilitated
Division of Rehabilitation Services

Year	Number Referred	Number Accepted	Number Rehabilitated
1989-90	6,871	3,607	1,865
1988-89	7,774	3,920	2,081
1987-88	7,381	3,564	1,906
1986-87	7,219	3,526	2,143
1985-86	7,129	3,551	2,184

Source: Connecticut State Department of Education

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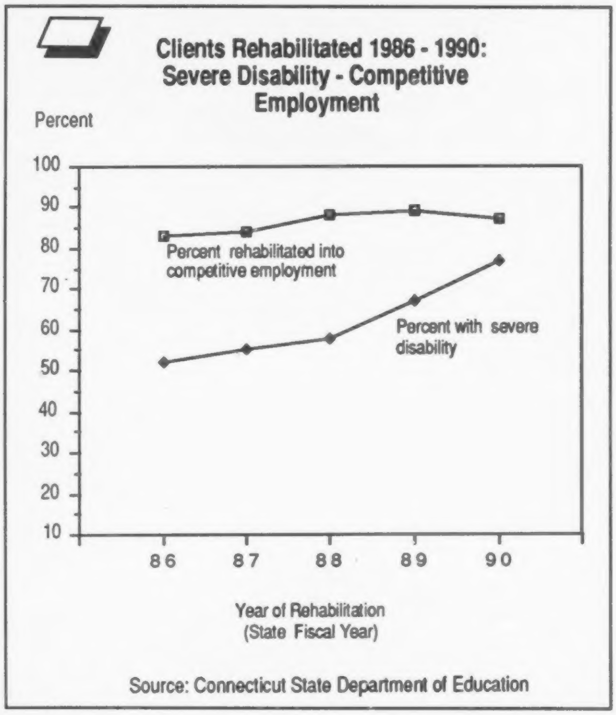
* Unless otherwise indicated, "1989-90" refers to the state fiscal year (SFY), which runs from July 1 through June 30.

In 1989-90, the percentage of persons rehabilitated who had severe disabilities (SD) increased to an all-time high of 77 percent, due to the division's continuing emphasis on serving the employment needs of these individuals. Services provided to persons with severe disabilities — services that often are multifaceted, costly and long-term — enabled many to enter the competitive labor force for the first time. Of all clients rehabilitated in 1989-90, 87 percent entered competitive employment.

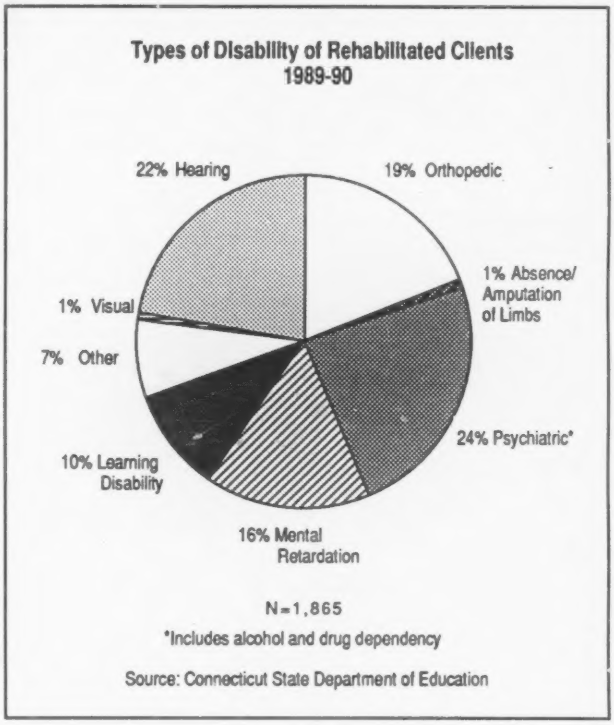

Clients Rehabilitated 1986 - 1990: Severe Disability - Competitive Employment

Source: Connecticut State Department of Education

Total annual earnings for the 1,865 persons rehabilitated in 1989-90 increased from $9,627,384 when they were referred for services to $23,796,760 when they were rehabilitated into employment. This is an increase of almost 150 percent.

Compared to previous years, the pattern of disability among individuals rehabilitated during 1988-89 and 1989-90 was somewhat changed. These two years saw a decrease in the proportion of rehabilitants identified as having psychiatric impairments, with proportional increases in the categories of orthopedic, hearing and learning disabilities. Other disability categories remained at essentially the same levels as in previous years.

During federal fiscal year (FFY) 1990*, 1,929 clients received education and training services as part of their rehabilitation plans. This represents a substantial increase over the total for FFY 1989 of 1,648. These experiences — which include postsecondary education, vocational training and supportive services such as counseling, guidance and placement assistance — have enabled many job seekers with disabilities to move into new and challenging jobs in business and industry.


Types of Disability of Rehabilitated Clients 1989-90

N=1,865

*Includes alcohol and drug dependency

Source: Connecticut State Department of Education

Supported employment programs. With the development of supported employment programs in Connecticut in recent years, opportunities have been greatly expanded for persons who have severe disabilities to work in competitive employment in their communities, alongside their nondisabled peers. This is accomplished by providing individualized support services which enable these individuals, many of whom previously were trained and employed in segregated settings, to work with the maximum level of independence in integrated work settings. Support services commonly include assistance from a job coach at the work site and the use of job shadowing, which enables the worker to observe and directly experience the job activities prior to performing them.

With the continuation of a five-year grant from the federal Office of Special Education and Rehabilitative Services (OSERS), initially funded in 1986, Connecticut and DRS remain at the national forefront of the supported employment initiative. Major activities under this grant during 1989-90 included training rehabilitation service providers in the implementation of supported employment programs; implementing demonstration projects in the Torrington and Simsbury schools to assist students with severe disabilities to make the transition into supported employment; and educating persons with disabilities, their parents and advocates, and other interested parties in new work incentive provisions under the Social Security disability program.

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* Federal fiscal year (FFY) 1990 was from October 1, 1989, through September 30, 1990. Education and training data for DRS clients are available by federal fiscal year only.

In addition to the OSERS grant, the division provides direct supported employment services to clients. A total of 130 clients were provided with supported employment case services during 1989-90, with an additional 105 individuals making successful transitions into employment with ongoing supports.

Also, funding was provided to two community-based pilot programs in Hartford to develop natural supports at the work site for individuals with long-term mental illness and for persons with mental retardation who previously had been employed in sheltered employment settings.

Traumatic brain injury (TBI) program. Since 1986, the division has received state funding to provide innovative and individualized vocational rehabilitation services to persons with traumatic brain injury (TBI). In conjunction with the Connecticut Traumatic Brain Injury Association and other agencies, these funds enabled DRS to provide services to more than 60 persons with severe head injury in 1989-90. Services to prepare these individuals for the demands of the workplace included cognitive therapy, work adjustment assistance and socialization skills training. Through the division's supported employment program, additional funding was provided to DATAHR Rehabilitation Institute of Danbury to expand job employment opportunities for persons with traumatic brain injury.

Transition from school to work. In cooperation with school personnel, DRS transition counselors facilitate the movement of their clients from the school environment to postsecondary adult activity including advanced education, specialized training and employment. Counselors attend planning and placement team (PPT) meetings, arrange for diagnostic evaluations and coordinate the joint development of the Individualized Education Program (IEP) and the Individualized Written Rehabilitation Program (IWRP).

A vocational rehabilitation counselor is assigned as liaison to each school system in the state to ensure that students with disabilities are given every opportunity to access vocational rehabilitation services in a timely manner. Statewide during 1989-90, DRS counselors attended 1,033 PPT meetings, developed 683 joint IEP/IWRP plans and assisted 334 students to enter employment. This compares to 1,094 PPTs attended, 653 plans developed and 340 students placed in employment in 1988-89. As part of a state-legislated and nationally recognized model program, three DRS transition counselors are assigned full-time to provide transition planning for students with disabilities in the Bloomfield, Hartford, West Hartford and Wethersfield schools.

As lead division for the Department of Education's transition initiative, the division fostered the expansion of school-to-work programs for students with disabilities by establishing an interdisciplinary transition steering committee representing schools, families, advocacy organizations and providers of services to adults, and by conducting a comprehensive assessment of the status of transition programming in the state's secondary schools.

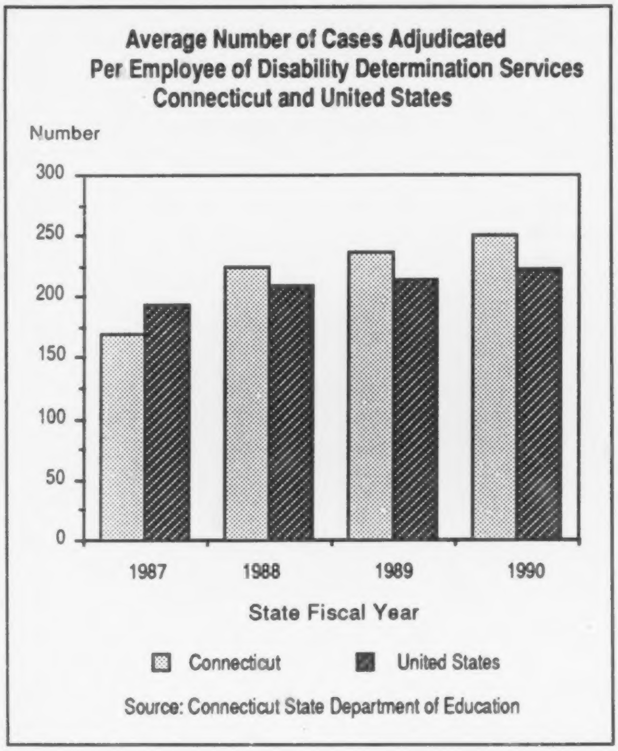
Independent living (IL). During 1989-90, the division significantly expanded independent living (IL) services for persons with severe disabilities. With a combination of state and federal funding through DRS, five centers for independent living (CILs) now operate in the Bridgeport, Hartford, New Haven, Norwich and Waterbury areas. Each center is community based and consumer controlled, and provides services tailored to meet the unique rehabilitation needs of its local constituency. Services offered through the CILs include information and referral, peer counseling, independent living skills training and advocacy. In 1989-90, these centers assisted 159 individuals toward their independent living goals. In addition, new grants to the centers have led to the establishment of innovative programs to serve individuals with traumatic brain injury, persons with psychiatric disabilities, persons with disabilities who are living in urban poverty areas, and residents of convalescent homes.

Through its comprehensive IL service delivery program, the division also provides services to those not eligible for the vocational rehabilitation program due to the severity of their

Types of Disability of Rehabilitated Clients
1985-86 through 1989-90
Disability Type (Percent)

Year	Psychiatric	Mental Retardation	Orthopedic	Hearing	Other	Learning Disability	Visual	Absence/ Amputation of Limb(s)
1989-90	24	16	19	22	7	10	1	1
1988-89	26	15	19	22	7	8	1	2
1987-88	31	15	18	18	8	8	1	1
1986-87	33	20	17	16	8	4	1	1
1985-86	32	18	18	16	7	6	2	1

Source: Connecticut State Department of Education



Average Number of Cases Adjudicated Per Employee of Disability Determination Services Connecticut and United States

Source: Connecticut State Department of Education

disabilities. During 1989-90, 32 individuals received specialized services such as home and vehicle modifications, electronic and adaptive equipment, personal care assistance, physical therapy and environmental modifications as part of their individual independent living plans.

With funding from the division's supported employment program, two independent living centers — in Norwich and Waterbury — were to receive grants in 1990-91 to aid persons with severe and multiple disabilities to obtain and maintain needed employment supports. These demonstration projects were to be carried out with the cooperation and assistance of the Connecticut Developmental Disabilities (DD) Council.

Disability Determination Services. As a partner with the federal Social Security Administration, Disability Determination Services (DDS) is responsible for processing claims for disability benefits by making accurate, prompt decisions on each applicant's eligibility for Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI).

In 1989-90, DDS adjudicated more than 21,000 claims, including 12,191 applications for SSDI benefits and 9,481 for SSI support. Case processing time in 1989-90 averaged 55.5 days. The quality and accuracy level for this period was 94.4 percent. DDS received national recognition as the most productive federal disability determination program in the nation, for its continuing success in reducing case processing time and increasing the average number of cases adjudicated per DDS employee. (See the graph above.)

The interrelationship between the DDS and vocational rehabilitation programs has assisted substantial numbers of Social Security recipients to become wage earners. Of 1,865 clients rehabilitated during 1989-90, 339 were recipients of SSI or SSDI benefits. Annual earnings for these individuals, which totalled $256,149 at referral, increased nearly tenfold to $2,127,736 at the time of employment.

In response to the complex issues posed by the incidence of AIDS, DDS designated an AIDS coordinator to ensure that claimants receive accurate, expeditious decisions on their applications for Social Security disability benefits, and that their cases are handled with particular sensitivity and understanding. The coordinator's activities also include developing and maintaining extensive contacts with providers of social services to individuals with AIDS.

To ensure that homeless individuals with severe disabilities have access to the Social Security disability benefits for which they are eligible, DDS and local Social Security offices have fostered new linkages with those who provide services to the homeless, particularly with shelters in the state's cities. These community-based contacts facilitate outreach to a population which tends to be mobile, and with which it is often difficult to maintain ongoing contact.

Consumer initiatives. In order to provide consumers and the general public with access and input regarding program planning and policy development, DRS continued to utilize advisory bodies such as its Statewide Advisory Council, which consists of consumers, rehabilitation service providers from the public and private sectors, legislators and employers. The council advises the division director on the direction and nature of DRS programs and services. Other advisory committees which continued to provide valuable guidance to the division during 1989 and 1990 include the Supported Employment Advisory Committee, the State Independent Living Council, a committee on rehabilitation facilities, and task forces on severe disability, traumatic brain injury and learning disabilities. The cooperative link with the Client Assistance Program, which is administered through the state Office of Protection and Advocacy for Persons with Disabilities, was strengthened, ensuring that DRS clients benefit fully from their vocational rehabilitation programs through individualized advocacy and mutual planning.

Other initiatives designed to enhance the delivery of rehabilitation services to individuals with disabilities, especially persons with severe disabilities, included implementation of an interim eligibility process which expedites the initiation of vocational rehabilitation services; increased utilization of rehabilitation engineering services through the use of adaptive aids and technology; and reduced reliance on the "medical model" of service delivery (medical evaluations for clients now are required only when absolutely necessary to determine their eligibility for VR services).

The statewide toll-free hot line, implemented in 1988, continued to provide information about the division's programs and to encourage ongoing input from consumers. Former clients of the vocational rehabilitation program were surveyed regarding their satisfaction with the services they received through the division. Finally, the DRS mission and programs were widely publicized through the development and dissemination of newsletters, pamphlets and informational flyers.

5

Finance

Quality education — the learning opportunities to which all children are entitled and to which Connecticut's Board of Education is committed — costs money. While money alone is not a guarantee of quality education, such education clearly cannot be provided without it.

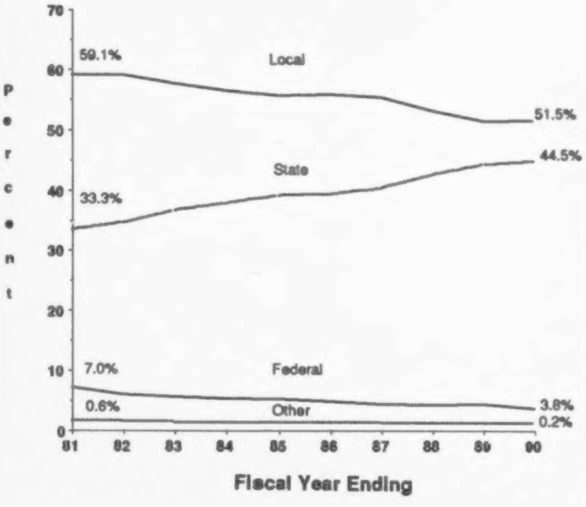
The level of funding in Connecticut and the way in which available resources are allocated reflect both the state's commitment and its priorities. Adequate financial support for the public schools and the choice of programs and services to which the dollars are directed are critical factors in the achievement of equity and excellence.

Sources of Funds

Public elementary and secondary education in Connecticut is supported by a mix of federal, state and local revenues.

Throughout the past decade, the state share of all expenditures for public elementary and secondary education has increased steadily. From a share of 33.3 percent in 1980-81, the state effort rose to 44.5 percent in 1989-90. During the same period, there was a corresponding decrease in the local share from 59.1 percent at the beginning of the decade to 51.5 percent in 1989-90. Federal funding remained relatively constant during the 1980s, causing the federal share of overall education spending to decrease.

Local, State, Federal and Other Shares of School District Expenditures



Source: Connecticut State Department of Education

The initial impetus for the shift in the balance of state and local funding was the *Horton vs Meskill* court case, which led to significant new legislation in the late 1970s. This legislation produced Connecticut's first broad-based education equalization aid formula (the Guaranteed Tax Base program) and introduced equalized reimbursement rates based on town wealth in the state's major categorical aid formulas.

Coupled with the *Horton vs Meskill* decision was the State Board of Education's advocacy of an equal state/local funding partnership. The state's commitment to increasing its share of education funding was best reflected by the enactment of two major grant initiatives in the late 1980s. The Education Enhancement Act (EEA) and the Education Cost Sharing Grant (ECS) produced dramatic increases in the state's commitment to education.

The Education Enhancement Act

The Education Enhancement Act (EEA) of 1986 was aimed primarily at improving education by strengthening the teaching profession. It established, in addition to provisions to upgrade teacher standards and certification requirements, a set of three-year grant programs which committed more than $360 million to enhance teacher salaries and reduce teacher-pupil ratio disparities.

The intent of the teacher salary and staffing programs of the Education Enhancement Act was to (1) provide salary levels adequate to attract and retain high-quality teachers, and (2) help bring about a more equitable distribution of teachers and teaching talent among the school districts. Since studies have shown that two-thirds of the disparities in per-pupil spending could be attributed to staffing patterns and compensation, EEA was focused on the largest source of expenditure disparities.

The impact of the Education Enhancement Act has been dramatic. Under EEA, from 1986 to 1989 the average starting salary at the bachelor's degree level increased 30.3 percent from $17,096 to $22,276. During that time, the average teacher salary in the state increased 29.6 percent from $29,437 to $38,140. The district-to-district salary disparities were dramatically reduced, with the gap between the highest and lowest starting salaries shrinking from 58.3 percent to 35.6 percent in one year, from 1986-87 to 1987-88. In 1989-90, the highest minimum salary increased to $28,700 (from $27,431 the previous year) while the lowest starting salary remained at $20,000. As a result, the disparity widened to 43.5 percent, but was still well below the 58.3 percent disparity that existed prior to EEA.

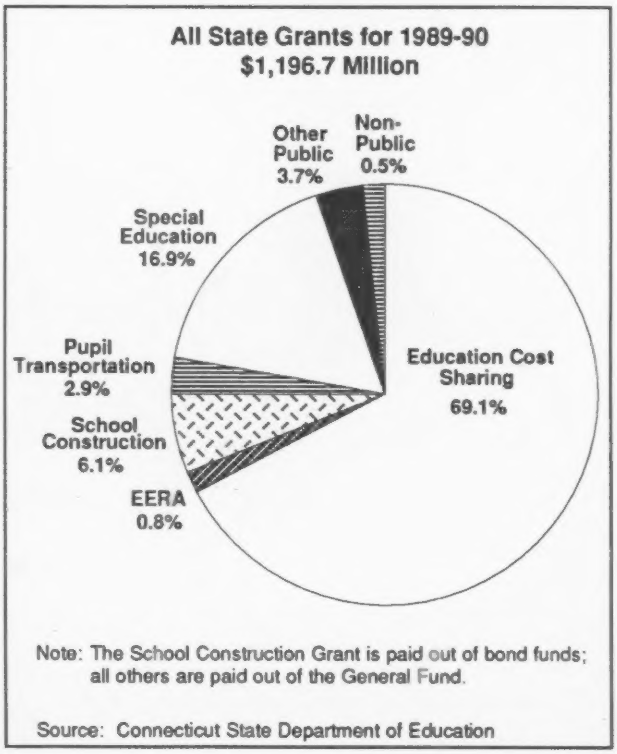
Staffing levels also improved under the Education Enhancement Act, specifically as a result of the Teacher-Pupil Ratio Grant. This program provided a total of 714 new positions in the state's 43 poorest districts. *(For more information on the effects of the Education Enhancement Act, see page ix. —Ed.)*

The Education Cost Sharing Grant

Fulfilling a promise made when the Education Enhancement Act was passed, the 1988 session of the General Assembly completed a restructuring of Connecticut's major school finance programs by creating the Education Cost Sharing (ECS) Grant. Effective in 1989-90, the first of a four-year transition to the new grant, ECS combined the pool of funds previously made available through the Guaranteed Tax Base formula and the Education Enhancement Act, and added to this base, through a revised equalization formula.

ECS focuses state resources on bringing all districts to a statewide minimum expenditure requirement, linking the equalization grant program and such state expenditure standards for the first time. This redefined per-pupil spending level, called Regular Program Expenditures (RPE), forms the basis of the new grant. Also, the RPE serves as the Minimum Expenditure Requirement (MER) for each town. Each town receives a portion of its RPE through the state ECS grant and provides the balance through local effort. Under ECS, the state/local partnership in meeting the MER is clear, because no other funding sources besides ECS and local tax effort count as Regular Program Expenditures.

The state's share of each town's RPE is based on municipal wealth as measured by property values and per capita income. This measure of wealth is calculated on an adjusted per pupil basis for the first time, allowing the formula to allocate more aid to towns with higher concentrations of school-age children. The statewide mastery test results are part of the determination of additional need, Connecticut being the first state in the nation to use educational determinants in distributing equalization aid. The ECS Grant also created a more responsive and equitable distribution by using one-year-old data, instead of the three-year-old data used in the former GTB grant.

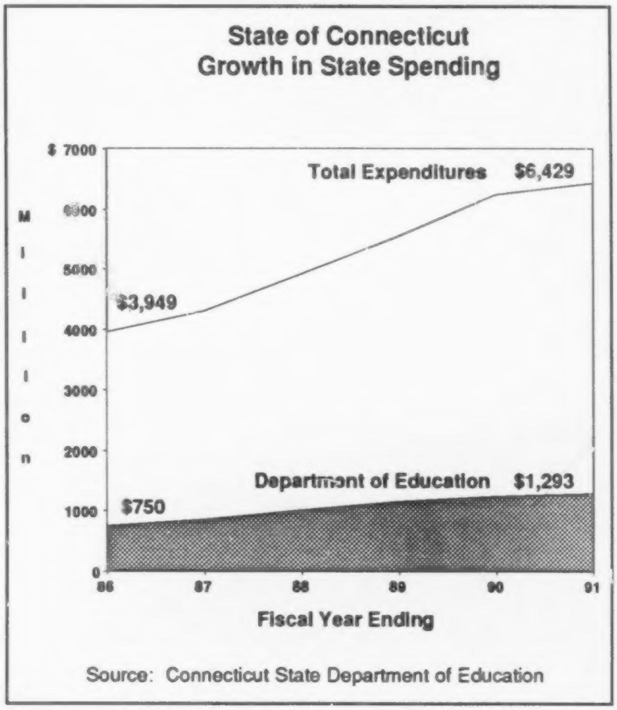

All State Grants for 1989-90
$1,196.7 Million

Note: The School Construction Grant is paid out of bond funds; all others are paid out of the General Fund.

Source: Connecticut State Department of Education

Current Funding

In 1989-90, grants comprised $1.1 billion or just under 92 percent of the State Department of Education's $1.2 billion General Fund budget. (The School Construction Grant continues to be paid out of bond funds.) The Department's General Fund appropriation of $1.3 billion for 1990-91 includes $1.2 billion for grants, the vast majority of which go to cities and towns. Grants continue to make up approximately 92 percent of the total Department budget, and carry the gains of the late 1980s into the new decade.


State of Connecticut
Growth in State Spending

Source: Connecticut State Department of Education

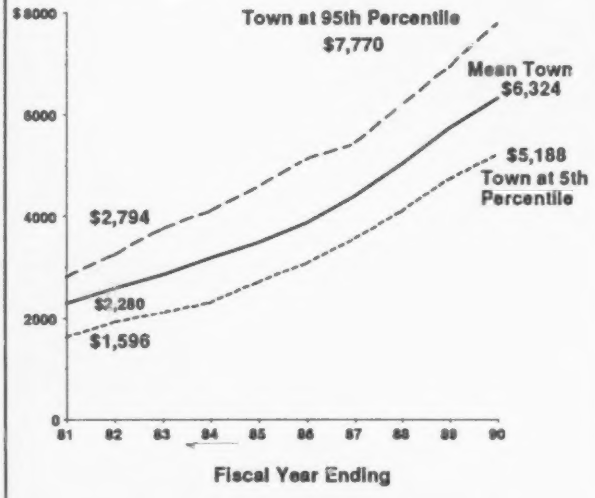
The major mandated formula grants such as ECS distribute most of these funds on an equalized basis. In addition to ECS, major grant programs such as Special Education, School Construction and Pupil Transportation are distributed on sliding reimbursement percentage scales based on town wealth. As the 1989-90 pie chart shows, these four programs accounted for 95 percent of the total $1.2 billion grant appropriation (General Fund and bond funds). Operation of the state's Regional Vocational-Technical School System accounted for 5 percent of the State Department of Education budget. Of the remainder, approximately 1 percent supported education program leadership, 0.75 percent funded Rehabilitation Services programs, while less than 1.5 percent supported state services and management.

State Department of Education expenditures for public elementary and secondary education in 1990-91 equal approximately 20 percent of total state general fund spending, a share that is 1 percent greater than it was prior to the implementation of the Education Enhancement Act. (See the graph on page 55.)

The Future

The gains of the 1980s were significant. The state share of total education expenditures increased by more than 10 percent. Spending disparities between the wealthier and poorer communities, as measured by the per pupil expenditures of the town spending at the 95th percentile as compared to the 5th percentile town, decreased by almost 15 percent from 1.75 to 1.49. The teaching profession was strengthened considerably through the Education Enhancement Act programs. A new equity formula was implemented with revised definitions of educational need and pupil-based wealth.

Net Current Expenditures Per Pupil*



* Net current expenditures per pupil include expenses per pupil for daily operation of the school program but do not include transportation, capital outlay, debt service expenses and tuition received from nonresident pupils.

Source: Connecticut State Department of Education

Despite these gains, education in Connecticut begins the 1990s subject to the same economic hardships that confront the entire state and region. For two consecutive years, major grant formulas were legislatively altered to reduce the cost of programs to the state. For the first time in a decade, the state share of education expenditures is projected to decrease in 1990-91. The per pupil spending disparity between the wealthier and poorer districts actually increased slightly in 1989-90. State aid is targeted primarily at poorer districts; thus, when state aid slows, spending by the poorer districts slows. This phenomenon results in losing ground previously gained in reducing spending disparities, since wealthier districts are less reliant on state aid and will continue to spend at higher levels, which may force a reexamination of the practice of using the highest-spending districts as a target for assessing appropriate education spending levels. Alternative models may have to be explored, including accountability models based on program effectiveness. Such alternatives will likely focus less attention on total resources expended and more attention on the outcomes of those expenditures. Also, early in the decade of the '90s, the state will be examining the potential cost and funding of programs aimed at implementing quality and integrated education throughout the state. These programs may have an impact upon funding strategies.

In addition, the ECS formula requires a reevaluation by 1992, when full implementation is scheduled.

Establishing statutory spending levels for the coming years and evaluating the long-term impact of sustaining guaranteed funding levels for wealtheir towns are issues which, when resolved, will affect the state share of education expenditures in this decade.

Indicators of Success

In *Design for Excellence, Connecticut's Comprehensive Plan for Elementary, Secondary, Vocational, Career and Adult Education,* the State Board of Education established five Statewide Educational Goals for Students and seven goals to be pursued by the Department of Education for the 1986 to 1990 period. Within each goal area the Board developed a set of indicators to measure progress in meeting the Board's goals.

The indicators are reliable and valid statistics which are measured over time, are easily understood and generally sensitive to policy direction. A statistic becomes an indicator if, in a policy context, it provides useful information about the health of our educational system.

The best and most recent data available to the Department of Education in 1984-1985 formed the "baseline" against which changes are measured. The difference between the baseline and the most recent statistics provides information about progress on each indicator, and thus about the Board's success in meeting its goals.

The indicators for the Statewide Educational Goals for Students and for State Board of Education Goals I-VI specify a desired direction of change. For example, an increase in time allocated to instruction or a decrease in per pupil expenditure disparity among school districts. The indicators for Goal VII, "To Report on the Condition of Education," do not specify direction but rather provide the context in which the success of the other indicators can be evaluated.

To represent change graphically, we have developed a set of symbols to show the trend or status of each indicator, i. e., progress toward meeting a goal. These are displayed in the box to the right. Under Goal area VII, the same symbols are used to represent change in the statistic.

⬆	Change is in the desired direction.
⬇	Change is counter to the desired direction.
⟷	There is little change.
▬	Baseline data. No data indicating change are available.
⊘	No data are available.

The symbols represent change relative to the baseline data reported in the *Comprehensive Plan for Elementary, Secondary, Vocational, Career and Adult Education 1986-1990: The 1985-86 Action Plan.* When change is markedly different from a longer range pattern, the differences are noted in the commentary.

The page number refers to the place in this document where the indicator is presented more fully and is discussed in the context of the state's people and schools, staff, student achievement, programs and finances.

STATEWIDE EDUCATIONAL GOALS FOR STUDENTS

Progress	Indicators of Success	Commentary	Page
↑	An increase in school attendance of students	The average daily attendance in 1989-90 was 94.3 percent, the highest ever recorded. The 1984-85 baseline percentage was 93.4. Average daily attendance in Connecticut is determined from attendance and enrollment reported on October 1 and May 1.	N/A
↑	An increase in the proportion of ninth graders who complete high school	The graduation rate (the percentage of ninth graders who complete high school four years later) was 78.8 percent in 1989, the highest of the decade. The 1984 rate was 77.8 percent. In the past 10 years, the graduation rate has been as low as 74.7 percent (1980). The rate does not include students who drop out and later obtain a high school equivalency diploma.	27
↔	An increase in student-reported time spent on homework	Eighth and eleventh grade students reported spending an average of 1.1 hours per day on all homework assignments in 1983-84. Fourteen percent of the eighth graders spent less than one-half hour. Eighth graders participating in the National Educational Longitudinal Study in 1988 reported spending an average of 1.2 hours per day on homework. Although this is essentially unchanged from the 1983-84 data, a greater proportion reported less than one-half hour (32% versus 14%) and a greater percentage reported more than two hours (15% versus 9%).	N/A
↑	An increase in the performance on Connecticut Mastery Tests at Grade 4, 6 and 8 over initial year results	Student performance on the 1989 Connecticut Mastery Tests was up in almost all subject areas and all grades over the initial administration (Grade 4 in 1985 and Grades 6 and 8 in 1986).	18-20
		In Grade 4, the average number of objectives mastered in mathematics increased from 19.3 to 20.6 (out of 25); the average number of language arts objectives mastered increased from 6.1 to 6.3 (out of 9); the average holistic writing score improved from 4.8 to 5.0 (on a 2-8 scale); and the average reading score in Degrees of Reading Power (DRP) units increased from 43 to 47 (with 99 as a maximum).	
		In Grade 6, the average number of objectives mastered in mathematics increased from 23.1 to 24.1 (out of 36); the average number of language arts objectives mastered decreased from 7.5 to 7.4 (out of 11), the average holistic writing score improved from 4.7 to 4.9 (on a 2-8 scale); and the average reading score in DRP units increased from 55 to 57 (with 99 as a maximum).	
		In Grade 8, the average number of objectives mastered in mathematics increased from 23.7 to 25.3 (out of 36); the average number of language arts objectives mastered increased from 7.5 to 8.0 (out of 11); the average holistic writing score improved from 5.0 to 5.5 (on a 2-8 scale); and the average reading score in DRP units increased from 61 to 63 (with 99 as a maximum).	

Progress	Indicators of Success	Commentary	Page
↓	An increase in the percentage of students in adult education programs who pass the GED test	The pass rate on the General Educational Development (GED) tests for those students enrolled in adult basic education programs has fluctuated in the past five years. From the 1985 baseline of 76.2, the pass rate has been as low as 65.1 percent (1990) and as high as 78.0 percent (1987). In 1988 a writing sample was added to the test, which may account for the decline.	28
↓	An increase in the achievement gains of students in Chapter 1, Educational Evaluation and Remedial Assistance (EERA), including bilingual, migrant and similar programs	Achievement gains for students in compensatory education and migrant programs are assessed biennially. The 1989-90 report on compensatory education will be available in the summer of 1991.	
		In the past three biennial assessments (1983-84, 1985-86, 1987-88), students in compensatory education programs (Chapter 1 and EERA) demonstrated positive normal curve equivalent (NCE) gains in both mathematics and reading. However, in mathematics the mean gain moved downward from +7.9 NCEs in 1983-84 to +5.4 NCEs in 1987-88. In the same period, the average reading achievement gain moved from +7.1 NCEs to +4.0 NCEs.	43-44
		Positive NCE gains were recorded in the past four biennial (1983-84 through 1989-90) assessments of mathematics and reading achievement of students in migrant programs. However, reading achievement gains have declined steadily since 1983-84. Due to a change in federal regulations, data were reported by levels for the first time in 1989-90. Gains in basic and advanced reading and mathematics ranged from 1.1 to 1.6 NCEs.	44-45
—	An increase in the performance of students on statewide tests of knowledge of science, mathematics, social studies, the arts, literature, languages, and thinking skills	None of these statewide tests of knowledge were scheduled to be repeated in the Connecticut Assessment of Educational Progress (CAEP) program between 1985 and 1990, so changes in performance cannot be assessed. In the baseline performances presented below, the assessments were conducted in Grades 4, 8 and 11 unless otherwise noted.	23
		Science performance in 1985 was above the national average in all three grades.	
		Mathematics is now assessed annually in Grades 4, 6 and 8 under the Connecticut Mastery Test program. The 1980 CAEP mathematics assessment found Connecticut students above the national average in Grades 4, 8 and 11.	
		On the 1983 social studies assessment, Connecticut fourth grade students equalled the national average, but sixth and eighth grade students were below it.	
		Both art and music performance in 1981 were above the national average at all three grades, with the exception of music at Grade 8.	
		Literature was assessed in 1983-84, but no national comparisons were available.	

(continued)

Statewide Educational Goals for Students (continued)

Progress	Indicators of Success	Commentary	Page
	An increase in the performance of students on statewide tests of knowledge of science, mathematics, social studies, the arts, literature, languages, and thinking skills *(continued)*	Foreign languages were assessed in 1987, but no national comparisons were available. The assessment of thinking skills is being incorporated into the Department's Common Core of Learning assessment currently under development.	23
↓	An increase in the Connecticut SAT scores at a rate greater than or equal to the national rate	Connecticut's verbal and mathematical scores have declined both absolutely and relative to the national average since 1984-85. In that time the state's verbal average has declined 10 points to 430, while the national average has declined 7 points to 424. Connecticut's mathematical average has declined 4 points to 471, while the national average has increased by a single point to 476. In 1989-90, 74 percent of Connecticut graduates took the SAT, compared to 40 percent nationally. The national average is inflated compared to Connecticut's average because the national average tends to include only above-average students in the 28 states in which the American College Test is the predominant test for college admissions.	24-25
↓	An increase in the Connecticut average on the Test of Standard Written English at a rate greater than or equal to the national rate	Between 1984-85 and 1989-90, the Connecticut average on the Test of Standard Written English (TSWE) decreased by 0.5 points, while the national average decreased by 0.2 points. The Connecticut average of 42.9 is now only 0.4 points above the national average, compared to 0.7 points above in 1984-85.	25-26
↓	An increase in scores of students on Advanced Placement tests	The percentage of Connecticut public school students who score three or better (a standard for receiving college credit) on Advanced Placement (AP) exams has declined from 75.4 percent in 1984-85 to 72.1 percent in 1989-90. (The 1989-90 figure, however, does represent an increase over the 1988-89 percentage of 69.6.) Nationally, 65.4 percent of public school students achieved this standard. Between 1984-85 and 1989-90, the percentage of Connecticut public school seniors participating in the AP program increased from 4.5 to 6.7.	26
↑	An increase in the percentage of students who are National Merit Commended Scholars	Based on the results of the 1989 administration of the Preliminary Scholastic Aptitude Test to high school juniors, the 1991 National Merit Scholarship program commended 825 students or 2.3 percent of Connecticut's public and nonpublic school 11th graders, an increase from the 2.1 percent commended in the 1986 program.	24
↔	An increase in the proportion of secondary school graduates in civilian or military employment, postsecondary education or training	In 1989, 97.0 percent of the local public school graduates and 94.0 percent of the vocational-technical school graduates were in civilian or military employment or postsecondary education or training programs. Baseline levels, set in 1984, were 95.2 percent of local public school graduates and 95.6 percent of vocational-technical school graduates. These figures exclude students whose status was unknown, who died or were incapacitated.	28-29

Progress	Indicators of Success	Commentary	Page
▬	An increase in the percentage of students demonstrating understanding of the principles of democratic societies and the American legal system on the Connecticut Assessment of Educational Progress	The 1982-83 Connecticut Assessment of Educational Progress in Social Studies measured knowledge of the principles of a democratic society using questions covering the concepts of majority rule, benefits of membership in political parties, political pressure groups, jury service and trial by jury, and constitutional rights including freedom of speech. Eighth grade students scored an average of 54 percent correct and 11th graders an average of 69 percent correct. Among 11th graders, 83 percent indicated they had voted in a school or class election, 27 percent had been a candidate in a school election, 9 percent had worked on a political campaign and 46 percent had volunteered for a community project. Students' understanding of the principles of a democratic society and the American legal system were part of the National Educational Longitudinal Study of Connecticut's 8th graders in 1988. Data from this study are expected to be available in late 1991.	N/A

GOAL I — TO ENSURE EQUITY FOR ALL CHILDREN

Progress	Indicators of Success	Commentary	Page
⬆	An increase in the state share of support for public education	The state share of the cost of public elementary and secondary education (including grants, bond funds, Department of Education central office and vocational-technical school expenditures, teachers' retirement costs and unified school district expenditures) has increased from 39.0 percent in 1984-85 to 44.5 percent in 1989-90.	54
⬆	A decrease in the disparity among districts of elementary and secondary staffing ratios	Between 1984-85 and 1989-90, the disparity in the number of teachers and support staff per 1,000 students between the districts at the 95th and 5th percentiles improved from 47.6 to 37 percent. The current disparity is the smallest ever recorded.	11
⬆	A decrease in per pupil expenditure disparity among school districts	Between 1984-85 and 1989-90, there was a significant reduction in the disparity among districts in per pupil expenditures. (Per pupil expenditures are total current expenditures less expenditures for regular transportation, capital expenditures for land, buildings and debt service, adult education, health and welfare services for nonpublic students, tuition received from nonresident students, and student activities and food service expenditures not supported by local taxes.) The difference between the 95th and 5th percentile districts ranked on expenditures per pupil fell from 70 percent in 1984-85 to a record low of 47 percent in 1988-89, then rose slightly to 50 percent in 1989-90. In 1989-90 the per pupil expenditure in the 95th percentile district was $7,770, compared to $5,188 in the 5th percentile district.	56

(continued)

Goal I — To Ensure Equity for All Children (continued)

Progress	Indicators of Success	Commentary	Page
↑	A decrease in the disparity among districts in starting and midcareer salaries	The Education Enhancement Act of 1986 provided towns funds to improve the starting and midcareer salaries of their teachers. Between 1985-86 and 1989-90, there was a significant reduction in the disparity in starting and midcareer salaries among the districts. The 76.8 percent difference in 1985-86 between the $11,497 low and the $20,322 high starting salary for teachers with a bachelor's degree was reduced to 35.6 percent in 1987-88. The starting salary range of $20,000 to $28,700 in 1989-90 represented a difference of 43.5 percent. The disparity in midcareer salaries (those of teachers with a master's degree at the top step of their salary schedule) fell from 84.7 percent in 1985-86 to 45.6 percent in 1988-89, then rose slightly to 47.6 percent in 1989-90. In that year, midcareer salaries ranged from $36,562 to $53,956.	11-13
↑	A decrease in the disparity among the state's subgroups of students (race/ethnicity, sex, school district, parental income and similar subgroups) in participation in educational programs and educational outcomes	Several measures are used to assess the disparity among the state's subgroups of students. In most cases, there was less disparity in participation rates and student outcomes in 1989-90 than in 1984-85.	
		The differences in performance on the Connecticut Mastery Test between white and minority students failed to narrow between 1987 (the baseline year for collection of data by race/ethnicity) and 1989. Across the grades, in 1989-90 an average of 74.8 percent of white students met state remedial standards on all three tests, compared to 37.4 percent of black students and 29.8 percent of Hispanic students. In 1987-88, 73.5 percent of white students, 36.3 percent of black students and 29.7 percent of Hispanic students met these standards.	N/A
		The difference in the performance of males and females on the Connecticut Mastery Test narrowed slightly between 1987 and 1989. Across the three grades, the percentage of females meeting state remedial standards on all three tests was 6.0 percentage points above that of males in 1989, compared to 6.6 points in 1987.	N/A
		In 1989-90, the difference in the average combined SAT verbal and mathematics scores of white students (925) and black students (717) was 208 points. In 1984-85, the difference was 219 points. The difference in the average combined SAT scores of white students (925) and Hispanic students (755) was 170 points, compared to a difference of 184 points in 1984-85.	25
		Males outscored females on both the verbal and mathematical portions of the SAT in the 1984-85 to 1989-90 period, but the gap narrowed. The 38-point gap in the mathematical SAT scores in 1989-90 equaled the smallest ever recorded (1987-88) and was an improvement over the 45-point gap that existed in 1984-85. The 6-point difference in the verbal SAT scores was better than the 8-point gap that existed in 1984-85.	25
		Since 1984, the proportions of white and minority high school graduates pursuing educational activities in general, and four-year colleges specifically, have increased, and the existing gap between these groups of students has narrowed. Among 1989 graduates, 73.9 percent of white students and 66.2 percent of minority students	28-29

Progress	Indicators of Success	Commentary	Page
	A decrease in the disparity among the state's subgroups of students (race/ethnicity, sex, school district, parental income and similar subgroups) in participation in educational programs and educational outcomes *(continued)*	pursued educational activities after high school. Compared to the 1984 figures of 67.3 percent and 52.8 percent, respectively, the gap has narrowed by 47 percent. The gap between the percentage of white and minority students attending four-year colleges narrowed between 1984 and 1989, as the percentage of whites increased 7.7 points to 53.9 percent and the percentage of minorities increased 11.6 points to 38.6 percent.	
		The difference in graduation rates of white students (83.5% in 1989) and black students (62.5%) decreased slightly between 1984 and 1989, as both groups' rates increased slightly (from 82.4 and 61.0 percent, respectively). The gap between white and Hispanic students decreased by almost 2 percentage points, as the graduation rate of Hispanic students rose from 45.9 percent to 48.8 percent in this period.	27

GOAL II — TO IMPROVE THE EFFECTIVENESS OF TEACHERS AND TEACHING

Progress	Indicators of Success	Commentary	Page
↑	An increase in teachers' starting and midcareer salaries to levels competitive with other occupations requiring similar training	The average midcareer salary of teachers surpassed in 1988 and 1989 that of positions in state service requiring comparable education and experience; starting salaries of teachers continued to lag, but the gap narrowed. Teachers' median salary at the top step of the master's degree schedule in 1989 was $42,934, or 5.5 percent above the top step salaries of state employees in the positions of Senior Accountant, Civil Engineer, Data Processing Systems Analyst I, Librarian, Personnel Officer II, and Social Worker. In 1985 teachers' median midcareer salary was 10.9 percent below this group. However, the mean starting salary of teachers in 1989 ($23,783) was 4.3 percent below the average starting salaries paid to Social Worker Trainees, Clinical Nurses, Computer Programmer Interns, Engineer Interns and Connecticut Career Trainees (business administration, accounting) in state service. The difference in 1985 was 21.5 percent.	12-13
↑	An increase in the percent of prospective teachers passing the CONNCEPT examinations	In 1987-88, 80.9 percent of prospective teachers and applicants for certification passed CONNCEPT (Connecticut's test of essential skills in reading, writing and mathematics) or received a waiver for high SAT scores. By 1989-90, 83.8 percent were passed or waived. In the baseline 1985-86 year, when the test was required only for admission to teacher preparation programs in the state, the percentage of prospective teachers passed or waived was 62.9.	13-14
↑	An increase in the SAT scores of those entering teacher preparation programs in Connecticut	In 1989-90, the estimated median combined SAT score of those seeking certification and admission to teacher preparation programs in Connecticut was 968, up 6 points from the comparable 1987 figure but 9 points below the 1988 high. In 1985-86, when the program population was primarily those seeking admission to the state's teacher preparation programs, the estimated median SAT score was 879.	17

(continued)

Goal II — To Improve the Effectiveness of Teachers and Teaching (continued)

Progress	Indicators of Success	Commentary	Page
⬆	An increase in state funds for professional development	The state supports professional development through the Institute for Teaching and Learning (initiated in 1984-85), professional development grants to local education agencies (initiated in 1986-87) and the cooperating teachers and mentorship program (initiated in 1986-87). The 1989-90 expenditures for these three programs — $7.6 million — was significantly greater than the $500,000 expended for professional development in 1984-85, but $1.6 million less than expended in 1988-89.	14, 31-32

GOAL III — TO IMPROVE SKILLS FOR FUTURE EMPLOYMENT

Progress	Indicators of Success	Commentary	Page
⬆	A decrease in the unemployment rate of high school graduates relative to the state rate	The civilian unemployment rate of graduates of the local and regional public schools improved between 1984 and 1989 faster than both the statewide and youth (ages 16-19) unemployment rates. The unemployment rate for graduates of the regional vocational-technical schools rose from 4.0 percent in 1984 to 5.4 percent in 1989, but remained well below comparable unemployment rates for local public school graduates and youth. During this period, the unemployment rate for graduates of the local and regional high schools improved from 11.8 percent to 6.6 percent. In addition, the statewide unemployment rate for 16- to 19-year-olds went from 13.3 percent to 11.8 percent and the total statewide unemployment rate went from 4.6 percent to 3.7 percent.	37-38
⬇	An increase in the percentage of students completing vocational-technical programs	The percentage of students completing vocational-technical programs declined steadily between 1984 and 1988, and then leveled in 1989. Of the students admitted to the state vocational-technical school class of 1989, 62.9 percent were graduated from a vocational-technical school. The comparable figure for the class of 1984 was 71.8 percent. Many students return to their local or regional high schools to complete their education. The decline may also be due in part to a more open admission policy resulting in a greater percentage of students with special needs.	N/A
▬	An increase in the performance of students on CAEP/ Vocational Education	Students in Business and Office Education programs were assessed in 1983-84 only. On the Business Knowledge Test of the Connecticut Assessment of Educational Progress (CAEP), 84 percent of secretarial, 84 percent of accounting and 61 percent of general office students scored at or above the standard of acceptable achievement for entry-level office workers. On performance tests of secretarial skills, 70 percent met the standard for format and typing of a letter, while [illegible]0 percent met the shorthand standard of 60 wpm. Thirty-nine percent of general office students met the standards for general office performance and 16 percent of accounting students met the standards for actual journal entries.	N/A

Progress	Indicators of Success	Commentary	Page
	An increase in the performance of students on CAEP/ Vocational Education *(continued)*	In April 1987 students in the comprehensive high schools and vocational-technical schools were given written and performance assessments in drafting, graphic arts and small engines. Across five performance tasks in drafting, an average of 71.6 percent of comprehensive high school students and 74.2 percent of vocational-technical school students met standards of performance expected of an entry-level employee. On the 12 jobs on the graphic arts test, an average of 93.7 percent of comprehensive high school students and 93.5 percent of vocational-technical school students met the performance standards. Due to the extremely small number of students participating in each job of the small engines test, the percentages of students meeting the standards were not reported. The average percentage of students responding correctly to multiple choice items deemed critical for entry-level employment ranged from 52 to 67 percent.	N/A

GOAL IV — TO IMPROVE AND EXPAND ADULT EDUCATION PROGRAMS

Progress	Indicators of Success	Commentary	Page
↓	An increase in the percentage of students in adult basic education programs who pass the GED test	In 1990, 65.1 percent of the 3,762 students who were prepared in adult basic education programs passed the General Educational Development (GED) test. The 1985 baseline percentage passing was 76.2 of 2,406 students.	28
↑	An increase in the number of adults in adult basic education programs	In 1989-90 there were 59,991 adults enrolled in mandated adult education programs, an increase of 16,608 adults (38.3%) over the 1984-85 count of 43,383 and the highest count on record.	41-42
↑	An increase in the number of adults from underserved populations in adult basic education programs	Underserved populations include black and Hispanic residents, females, single parents, recipients of Aid to Families with Dependent Children (AFDC) and 16- and 17-year-old out-of-school youth. From 1984-85 to 1989-90, the number of blacks enrolled rose from 8,855 to 11,167 (+26.1%), while the number of Hispanics enrolled increased from 12,302 to 18,379 (+49.4%). During this period, the number of females enrolled increased, and in 1989-90, 58.5 percent of those enrolled were females. The number of 16- to 24-year-olds rose by 37.0 percent to 24,447. The numbers of single parents and people receiving AFDC benefits are unknown.	41-42
↑	An increase in the state funds for adult education	State funds for mandated adult education programs more than tripled between 1984-85 and 1989-90, increasing from $2.01 million to $6.82 million.	N/A

GOAL V — TO IMPROVE AND EXPAND EARLY CHILDHOOD PROGRAMS

Progress	Indicators of Success	Commentary	Page
⬆	An increase in the number of districts offering extended-day kindergarten	In the fall of 1989, 38 school districts offered full-day or extended-day kindergarten programs to at least some children, compared to 23 in the 1985 baseline year and four in 1980-81. In 1989, there were 2,815 students in extended-day programs and 6,670 enrolled in full-day programs, up from 2,039 and 3,732, respectively, in 1986. In 1989, 24.2 percent of all public school kindergartners were enrolled in extended-day or full-day programs, compared to 15.5 percent in 1986.	3, 33
⊘	An increase in the percentage of children ages birth to three, and diagnosed as handicapped, who are provided a program or service	Because the number of children birth to three diagnosed as handicapped is unknown (school districts are not mandated to provide services to children under 2 years 9 months), calculation of the percentage served cannot be made currently. A statewide interagency database for the birth-to-three population is scheduled to be operational in 1991. These children are served in programs of the Department of Mental Retardation, the Department of Health, regional educational service centers, local and regional school districts, Easter Seals, United Cerebral Palsy, the Association of Retarded Citizens and others.	N/A
⬆	An increase in the number of approved day-care facilities	The number of approved day-care facilities increased from 1,110 in 1985 to 1,423 in 1990. In that period the number of children enrolled increased by 53.6 percent to 72,117.	33
▬	An increase in the number of public school programs for four-year-olds	In 1989-90, 100 districts offered prekindergarten programs to a total of 4,236 youngsters. This was the first year an accurate count was available.	33
↔	An increase in the state funding for early childhood education programs	The State Department of Education has three grants specific to early childhood education. The Young Parents Program (established by statute to assist local and regional school districts design and implement education programs for young parents with day-care components in a school setting) was initially funded at $234,000 in 1986-87. In 1989-90, it was funded at $200,000. The Extended-Day Kindergarten grant was established in 1987-88; it was funded at $735,000 in 1989-90, down $245,000 from its initial level. The Birth-to-Three Special Education Programs and Services grant was established in 1987-88 at a funding level of $350,000; in 1989-90, it was funded at $250,000.	32-33

GOAL VI — TO IMPROVE THE QUALITY OF CURRICULUM AND INSTRUCTION

Progress	Indicators of Success	Commentary	Page
⬆	An increase in time allocated to instruction	The time allocated to instruction has increased at all grade levels since the 1984-85 school year. Districts scheduled an average of 966 hours of elementary instruction in 1989-90 versus 951 in 1984-85. This represents an average of an additional 5.0 minutes daily. Hours increased from 949 to 959 at the intermediate level (an average of 3.3	N/A

Goal VI — To Improve the Quality of Curriculum and Instruction (continued)

Progress	Indicators of Success	Commentary	Page
		additional minutes daily), from 947 to 966 at the middle school/ junior high level (6.3 minutes daily) and from 943 to 955 at the high school level (4.0 minutes daily).	
↑	An increase in the number of credits taken by graduating seniors	Students in the class of 1988 in the state's comprehensive public high schools took an average of 4.2 credits in English, 3.6 in mathematics, 3.5 in social studies, 3.0 in science, 1.5 in physical education, and 1.9 in foreign languages. This is up from 1984, when students took an average of 4.1 credits in English, 3.1 in mathematics, 2.9 in social studies, 2.6 in science, 1.4 in physical education and 1.6 in foreign languages.	N/A
↑	An increase in the number of gifted and talented programs at elementary, intermediate and high school levels	The numbers of programs for gifted and talented students have increased at every level since 1984. In 1989, 160 (of 166) school districts offered at least one such program, compared to 140 (of 165) in 1984. The number of programs increased by 15 at the elementary and middle/junior high school levels and by 6 at the high school level.	48
↑	An increase in the percentage of students taking courses eligible for college credits	In the 1989-90 school year, 7,015 students in high schools took 11,416 courses eligible for college credit (Advanced Placement, University of Connecticut, and others). This represents an increase from 5,847 students taking 10,331 courses in 1988-89, and 4,716 students taking 8,453 courses in 1985-86, the baseline year. The percentage increases in the 1989-90 figures from the 1988-89 figures are 10.5 percent for courses and 20.0 percent for students.	26
↑	A decrease in the percentage of students requiring remedial assistance	The percentages of the students in Grades 4, 6 and 8 who fell below state standards on at least one of the Connecticut Mastery Tests of reading, writing and mathematics have declined since the tests were first administered. In Grade 4 the percentage improved from 40.4 percent (1985) to 34.1 percent. In Grade 6 the improvement was from 42.7 percent (1986) to 36.4 percent, and in Grade 8 the percentage fell from 36.3 percent (1986) to 26.7 percent.	18-22

GOAL VII — TO REPORT ON THE CONDITION OF EDUCATION

Status	Indicators of Change	Commentary	Page
↑	Per pupil expenditures	The mean net current expenditure per pupil increased from $3,490 in 1984-85 to $6,324 in 1989-90. Over the past five years this expenditure increased at an average annual rate of 12.6 percent.	56
↑	Class size, staffing ratios	School staffing ratios have improved steadily over the past decade. In 1989, there were 75.3 teachers per 1,000 students, up from 68.8 in 1984. The number of support staff (counselors, psychologists, social workers and reading consultants) was 6.1 per 1,000 students, up from the 1984 level of 5.6.	11

(continued)

Goal VII — To Report on the Condition of Education (continued)

Status	Indicators of Change	Commentary	Page
↓	Percentage of poor (AFDC) students	The percentage of students receiving Aid to Families with Dependent Children (AFDC) declined slightly from 11.1 percent in 1984-85 to 10.4 percent (representing 47,227 children) in 1989-90. It reached a recorded low of 9.9 percent in 1988-89. Because AFDC benefits do not bring a family even to the national poverty level, and because of the high costs of housing and heating in Connecticut, these figures may underestimate the number of students living in poverty.	7
↑	Average teacher salary	In 1989-90, the mean salary of teachers and support staff rose to $41,361, an increase of 65.7 percent over the 1984-85 baseline. Over the past five years the average salary increased at an average annual rate of 10.6 percent. The 1989-90 average salary was ranked second in the nation.	11-13
↑	Percentage of minority students	Minority students represented 24.3 percent of the public school enrollment in 1989, compared to 21.1 percent in 1984-85 and 17.2 percent 10 years ago. Between 1984 and 1989, the number of minority students in the public schools increased from 100,125 to 112,469.	8
↓	Percentage of students attending nonpublic schools	The percentage of Connecticut residents enrolled in the state's nonpublic schools has declined from 14.0 percent in 1984-85 to 12.6 percent in 1989-90. The 1989-90 nonpublic school enrollment of 66,950 does not include an unknown number of Connecticut residents attending private schools out of state.	7
↑	Number of limited-English-proficient students	The 11,517 students identified in 1989 as eligible for enrollment in state-mandated bilingual education programs in 1990-91 was 1,575 students (15.8%) more than the number identified in 1984. This underestimates the number of limited-English-proficient students, however, as bilingual program funding is limited to students in schools with at least 20 students who speak a particular language and who have limited English proficiency. In 1989 the 12 districts which provided bilingual programs identified 1,942 additional limited-English-proficient students, compared to 1,736 in 1988. In addition, 103 public school districts responding to an optional survey identified 1,775 limited-English-proficient students.	8, 46-48
↑	Percentage of female and minority administrators	The percentages of women and minorities holding administrative positions have increased over the past several years. Women now constitute 30.7 percent, and minorities 7.1 percent, of all administrators. In 1984-85 the percentages were 19.5 and 6.6, respectively. In 1989 the total professional staff was 67.0 percent female and 6.3 percent minority.	13
↑	Percentage of female and minority students in vocational-technical schools	The percentages of female and minority students in vocational-technical schools have been increasing steadily. Minority students comprised 25 percent of all vocational-technical students in 1989-90, compared to 19 percent in 1984-85. Females were 28 percent of the students in 1989-90 versus 25 percent in 1984-85.	4, 37

Status	Indicators of Change	Commentary	Page
↔	Percentage of male and female students completing nontraditional vocational programs	Between 1984 and 1989, the percentage of female students completing traditional male vocational programs increased, but the percentage of males completing traditional female programs was essentially unchanged. (A vocational program that is nontraditional for one sex was defined in 1981 as one in which at least 80 percent of the participants were of the opposite sex.) The percentages for both males and females are currently below five-year highs. Females were 7.1 percent of the completers of traditionally male programs in 1989 compared to 4.8 percent in 1984 and 9.1 percent in 1988. Males were 21.7 percent of the completers of the traditionally female programs, compared to 21.4 percent in 1984 and 23.6 percent in the 1985 peak.	37, 39
—	Percentage of scholarship loan recipients (ELEET, Shortage) who enter teaching	The state's two scholarship loan programs were both terminated in 1987, and now only support those individuals already in the programs. Between 1984 and 1988 the Teacher Incentive Loan Program provided loans to 287 students planning to teach in shortage areas. As of October 1990, 125 had entered teaching. The ELEET program since 1985 has provided 220 scholarship loans to students with high SAT scores who intended to teach. As of October 1990, 56 were teaching.	N/A
↑	Average SAT scores of students intending to study education	The average combined verbal and mathematical SAT score of those high school students intending to study education rose by 24 points to 852 between 1984-85 and 1986-87, then fell by 4 points by 1989-90. It had been as low as 803 (1981-82). Prospective education majors are now 52 points below the state average SAT score, a distinct improvement over the 87-point deficit that existed in 1984-85.	17
↑	The supply and demand for teachers including the percentage of college-bound students intending to study education	In 1989-90 there was sufficient supply of teachers to meet the general demand, although there continued to be spot shortages in speech and hearing, industrial arts, library/media and special education. Between 1985 and 1989, teacher turnover ranged from 5.1 to 6.4 percent, or about 2,300 professionals annually. Between 1986 and 1989, the number of people hired to fill vacant positions declined from 3,178 to 2,273. In the past three years, between 47.9 and 56.1 percent of the positions available have been filled by teachers returning to teaching after an absence. In the past three years in Connecticut, an average of 3,042 initial teaching certificates were awarded annually. About 20 percent of the certificates were awarded to current graduates from Connecticut's colleges and universities. In the same period, an average of 28.3 percent of those initially certified obtained employment in a public school within one year of certification. Indicators of future supply remain generally positive. The decline in the number of bachelor of education degrees awarded by Connecticut colleges and universities appears to have ended. The 1989-90	15-17

(continued)

Goal VII — To Report on the Condition of Education (continued)

Status	Indicators of Change	Commentary	Page
	The supply and demand for teachers including the percentage of college-bound students intending to study education *(continued)*	count (748) was essentially unchanged from that of 1984-85. The number of master's degrees awarded in education has increased for the past five years; the 1989-90 count of 2,099 is 545 more than the 1984-85 low. The number of high school students indicating an intent to study education has increased significantly in the past five years. An estimated 2,368 seniors in 1990 indicated such an intent, compared to 1,180 in 1985.	
↓	The number of handicapped students placed into competitive employment	In 1989-90, 1,631 clients rehabilitated in programs supported by the Division of Rehabilitation Services were placed into competitive employment, compared to 1,808 in 1985-86. The percentage of rehabilitated clients placed into competitive employment has increased from 82.6 to 87.4, however.	51
↑	The proportion of vocational education program completers who obtain a full-time job related to their training, pursue additional education, or enter the military	In 1989, 72.1 percent of all vocational education program completers either obtained a full-time job related to their training (22.1%); pursued additional education (47.1%); or entered the military (2.9%). This figure is up from the 1984 level of 68.9 percent.	37, 40
⊘	The number of handicapped students graduating high school and placed into post-secondary training	In 1989-90, 2,110 handicapped students were graduated from high school with a diploma or certificate of completion. The number placed in postsecondary training is not available.	N/A
↑	The number of handicapped students in vocational education programs	There were 22,604 students with disabilities enrolled in vocational programs in the local and regional school districts in 1989, compared to 19,457 in 1985. In 1989-90, 27.4 percent were enrolled in occupational programs (the remaining were in consumer home economics, industrial arts or other nonoccupational programs), compared to 27.8 percent in 1985-86.	N/A
↑	Percentage of public high school students enrolled in the vocational-technical schools	The percentage of public high school students enrolled in the vocational-technical schools (which had been 7.7 or 7.8 percent from 1984 to 1987) rose to 7.9 percent in 1988 and 8.0 percent in 1989. Ten years ago 6.2 percent of public high school students were enrolled in the state's vocational-technical schools.	35-37
↓	The average score on the General Educational Development (GED) tests	The average scores in four of the five areas (writing skills, reading, mathematics and science) of the GED were lower in 1989 than 1984. The average social studies score was slightly higher in 1989 than in 1984. In 1988, the writing skills test was revised to include a writing sample. The total average score of all five components of the GED was 242.0 in 1989, compared to 247.3 in 1984.	N/A

7

Meeting the Challenge

The past year, 1989-90, was a year of transition for the State Board of Education and the State Department of Education.

The challenges of the 1990s are many: the persistence of the "two Connecticuts" — one wealthy, one poor; the continuing isolation of ethnic groups from traditional "mainstream" groups in housing and education; the increase in the number and proportion of infants and children with significant health and developmental deficits; a changing economy resulting in dislocated workers, higher unemployment, families in crisis, and increasing demands for public resources with which to respond to our citizens' needs.

We are being asked to do more, and better, with less. This is perhaps most true of our educational system, which touches all of us, directly or indirectly, each day — and whose achievements will in good measure determine the quality of our society in the years ahead.

Planning for the Future

Our best hope for securing a good and rewarding future lies in establishing — and making a commitment to — a vision of what we want that future to be, the actions that must be taken in order to achieve it, ways of knowing how much progress we are making, and approaches to making decisions about changes that may be necessary in what we're doing and how we're doing it. For the State Board of Education, this constitutes an 18-month consensus-building process and a plan: the development and adoption, in April 1990, of *Challenge for Excellence: Connecticut's Comprehensive Plan for Elementary, Secondary, Vocational, Career and Adult Education—A Policy Plan 1991-1995*. This third five-year plan prepared by the State Board of Education reflects both the transition from the 1980s and a vision of public education in the 1990s.

Fundamental to the Board's challenge is a commitment, articulated in the Comprehensive Plan, to "high expectations for all of Connecticut's public school students, regardless of their town of residence, economic or social background or unique needs." The Statewide Educational Goals for Students 1991-1995 are:

- Motivation to Learn;
- Mastery of the Basic Skills;
- Acquisition of Knowledge;
- Competence in Life Skills; and
- Understanding Society's Values.

These five goals provide a comprehensive statement of the expectations we have for all students as a culmination of the public school experience in Connecticut. They also provide a foundation and a perspective for school districts as they pursue their statutory obligation to set high expectations for student performance by adopting local goals (due on or before July 1, 1992) that are consistent with the Statewide Educational Goals for Students.

As the state/local goal-setting process evolves in the coming year, the State Department of Education and the State Board of Education intend to develop specific numerical standards and targets for student outcomes articulated in the Indicators of Success for the Statewide Educational Goals for Students. Further, consistent with an objective of *Challenge for Excellence* and with state legislation passed and signed in the spring of 1990, the State Department of Education, in consultation with representatives of education organizations throughout the state, will develop a format for strategic profiles of schools and school districts. These profiles will serve as the mechanism by which local and regional boards of education will be able to meet the new requirement that they report annually to the public (beginning in the spring of 1992) progress on the Indicators of Success for their own educational goals for students.

Thus, the state/local partnership in accountability for student performance — for student success — will grow stronger in the coming years.

Challenge for Excellence also includes eight State Board of Education policy goals for the State Department of Education that serve as enabling or operational goals. These goals and their supporting objectives articulate the essential changes to the state educational system that will enable the attainment of the goals for student performance. The first policy goal is "To Ensure Equity for All Children." Additional goals address the effectiveness of teachers and teaching, access to early childhood programs and services, improvement in employment skills, the breadth and quality of adult education programs, the quality of instruction and curriculum, the operation of the Regional Vocational-Technical School System, and the continuing need to improve reporting on the condition of education in Connecticut.

While the Connecticut State Board of Education was developing its 1991-1995 Comprehensive Plan for education, the president and the nation's governors were setting national educational goals for attainment by the year 2000. Due to differences in state and federal roles, the national goals adopted in February 1990 are narrower, targeted priority statements while the State Board's goals are long-range, comprehensive and inclusive statements both for students and the educational system. As a result, each of the National Education Goals has an analogous goal or objective in Connecticut's 1991-1995 Comprehensive Plan, but Connecticut's educational goals are not fully reflected in the national goals.

Clearly, the dynamic process of setting goals, working toward objectives, evaluating results and, when necessary, revising both the plan and the process is no longer limited to the state/local partnership. Goals, objectives and accountability for meeting them now are on the national agenda, and the partnership is growing.

Targeting Resources

The 1991-1995 Comprehensive Plan calls for the targeting of state resources and leadership to those school districts that have the greatest need. In difficult economic times, this is particularly important and particularly compelling. For example, 1989-90 was the first of a four-year transition to the Education Cost Sharing (ECS) Grant, a significant restructuring of the state's major school finance program. Designed to direct more funds to communities with the greatest need, the ECS formula takes into account municipal wealth, allocates more aid to towns with higher concentrations of school-age children, and includes statewide mastery test results as part of the determination of educational need in each community.

Structuring the ECS and other grants in this way is one element of the legislature's and State Board of Education's commitment to reducing disparities in resources, programs, services and student outcomes. Another approach to meeting this commitment lies in directing the human resources of the Department of Education — the time and talent of its staff — to assist districts (and, therefore, students) most in need.

A significant example of this approach is an urban initiative that will have as its focus a direct partnership between the State Board of Education and the Hartford Board of Education. Responding to increased concerns about the achievement of students in urban settings during the late 1980s, discussions of an urban initiative were begun in the fall of 1990. The Hartford Partnership, which is described in greater detail in the "Update" chapter of this report (see page viii), would have as its primary mission the task of assisting Hartford students to learn at significantly improved levels.

Schools as Community Resources

The history of public education in the United States is complex and always changing, but one fact remains relatively constant: When times, problems and competition are tough, Americans turn to their schools for support, solutions and success. The classic example of this was the nation's response to the Soviet Union launching the first orbital spacecraft — the Sputnik series — in the 1950s. Schools were asked to improve instruction in science and mathematics; the whole nation focused on the competitive exploration of space. Soon the United States was ahead in the "space race," and in 1969 it was an American who first walked on the moon.

As the final decade of the 20th century begins, the field of competition and the players — even the nature of the game (once almost exclusively competitive, now interdependent) — have changed, as noted by Robert D. Kennedy, chief executive officer and chairman of the board of Connecticut-based Union Carbide. "Today we are challenged again," Kennedy said during the March 1990 Symposium on Accountability sponsored by the State Board of Education, "but this time the challenge comes not from the Soviet Union, but from Japan, Europe, Korea, Hong Kong and Taiwan. We are being challenged economically from all over the world. We are not insulated from what happens outside of the United States. We are economically interdependent, and I am afraid the American people need an educational Sputnik to wake up to the problem."

Many sectors of our society are placing renewed demands on the nation's educational system to improve student performance and, as a result, the quality of the nation's work force. Corporate leaders across Connecticut and the country are calling for changes — and, in many cases, committing resources to help make the changes happen. A public/private partnership on behalf of learners of all ages will be a key factor in education during the 1990s and into the next century.

Tough economic competition is not the only challenge to which schools are being asked to respond. Several indicators of our children's health and well-being showed serious decline during the late 1980s. As a result, schools are being asked, expected — even required — to provide health care, nutritious meals, prevention and intervention in areas such as substance abuse, youth suicide, child abuse and neglect. Low-birth-weight babies, babies born to teenage parents, born into poverty, born with AIDS or addicted to drugs are at significant risk of serious developmental problems that will interfere not only with learning, but also with daily living. As the number of such children has increased dramatically, schools (working with a wide variety of local and state resources) face the enormous challenge of providing health, education and support services to these children — and, indeed, to all children with special needs — and their families. These will continue to be areas of emphasis for the State Board and State Department of Education, which will continue to provide materials and technical assistance to school districts as they address the needs of their students and work collaboratively with other child- and family-serving agencies.

With Connecticut's economy in transition away from the "boom" of the mid to late 1980s, both children and adults will be in need of more and more services from schools. Working parents with school-age children increasingly look to schools for before- and after-school programs as the preferred alternative to having their children in "self-care" — alone at home. The changing economic picture has created a greater demand for adult education programs of all types, from high school equivalency classes to employment retraining programs. In addition, the federal Family Support Act of 1988 requires parents under the age of 20 who are receiving welfare benefits and who do not already have a high school diploma to enroll in a diploma program. The law also requires that day care be provided for the children of welfare recipients who are required to participate in educational programs. The impact of the legislation on school districts, state agencies and other organizations will continue to be significant.

To address concerns about the lack of standardization of adult education programs offered by local education agencies throughout Connecticut, the Departments of Education and Higher Education are developing a Comprehensive Plan for Adult Education for adoption by both boards and subsequent legislative action. Adoption of the plan by the State Board of Education and the Board of Governors for Higher Education is expected in the spring of 1991, with legislative and budgetary proposals anticipated for the 1992 session of the General Assembly.

The refinement of the school's role as a logical provider to address the growing human resource development needs of children, families and communities will continue to be a principal characteristic of the state's educational system in the 1990s.

Student Performance

As emphasized in *Challenge for Excellence 1991-1995*, accountability for student performance will be a key issue in the 1990s. Accountability initiatives that will command much attention and demand much time and effort in the coming years include the following:

- development of Strategic School and District Profiles, which are to be prepared annually by each local board of education beginning in May 1992;
- development of an additional statewide assessment of student performance, a 10th grade mastery test, which was authorized in 1990 by the legislature to be administered annually beginning in the fall of 1993;
- development of statewide standards and numerical targets for the Indicators of Success for the State Board's Statewide Educational Goals for Students 1991-1995;
- development of the new Connecticut Common Core of Learning Assessment Program, which will include performance assessment tasks at the high school level; and
- completion of a multiyear evaluation of special education programs that will measure gains in student performance.

The focus for evaluation of special education programs in Connecticut exemplifies the transition from procedural to outcome-oriented evaluations in all areas — bilingual education, compensatory education and, indeed, "regular" education. The emphasis is no longer on such questions as "Do these programs include certain structures and offer required instruction under specified circumstances?" Rather, the focus is on the question, "Are the students learning and benefiting — intellectually, socially and emotionally — from these programs?" Consideration is being given to the role of the Department of Education's Program Compliance Review (PCR) effort in evaluating whether programs are improving students' learning — and their lives.

Consistent with an ongoing commitment to ensuring that all students can achieve at high levels of performance and that Connecticut students have equal access to educational programs, the state's Regional Vocational-Technical School System will continue its efforts to serve the needs of all students, including females, minorities and students with special educational needs and limited English proficiency.

Teacher Competencies

The performance of students is dependent principally on the performance of teachers; effective teaching is the key to successful learning. The Education Enhancement Act of 1986 acknowledged this, providing state funds to increase teacher salaries in order to attract and retain talented educators, and to establish a rigorous continuum of licensing standards and ongoing professional development for those who wish to enter and remain in the profession. These efforts to improve the competencies of our teachers must continue. Critical in the coming years will be the continued use of CONNCEPT (a test of basic skills that must be passed in order to enter a teacher preparation program in Connecticut and to be certified as a teacher in the state), CONNTENT (tests to determine prospective teachers' knowledge of their specific subject areas), the Beginning Educator Support and Training (BEST) Program (which provides beginning teachers with mentor teachers who offer advice and support, and assigns assessors to evaluate whether the new teachers have the necessary skills to continue in the classroom), and the requirement that experienced teachers earn nine continuing education units (CEUs) every five years in order to continue their state certification.

Quality and Integrated Education

Educational programs and environments that acknowledge, encourage and celebrate ethnic diversity are central to the goal of providing equal educational opportunities for all learners. Voluntary approaches to establishing and nurturing quality and integrated education in Connecticut were the focus of the Governor's Commission on Quality and Integrated Education, which conducted its work from September 1989 through December 1990. Details of the Commission's findings and recommendations are described in the "Update" chapter of this report, beginning on page vii. It is now the responsibility of the State Board of Education and the State Department of Education to move ahead with the Governor's Office to pursue the Commission's recommendations and the resources that will be required to implement them.

Looking Ahead

We have already begun to see the positive results of the state/local partnership in identifying and meeting student needs, and in enhancing the teaching profession. Real issues and real concerns remain, but all those involved in education in Connecticut share a sense of urgency and a commitment to being responsive to those concerns. The efforts of the past several years did not provide a "quick fix" for any of these concerns; progress already achieved must be maintained and enhanced to the best of our ability.

All of these educational endeavors — from targeting resources to those most in need, to expanding quality and integrated education in Connecticut — require effort: energy, expertise and the expenditure of funds. In a period of fiscal constraints, one of our most demanding tasks will be to do more, and better, with less.

That task, however, will be more than worth the effort.

There is always room for improvement, even under the best of circumstances. The challenge now is to continue to improve despite difficult circumstances. The first step is believing that we can. We do.

In fact, we ***know*** we can.

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